THE ARCHITECT & BUILDING NEWS

20 JANUARY 1960 VOL. 217 NO. 3 ONE SHILLING WEEKLY

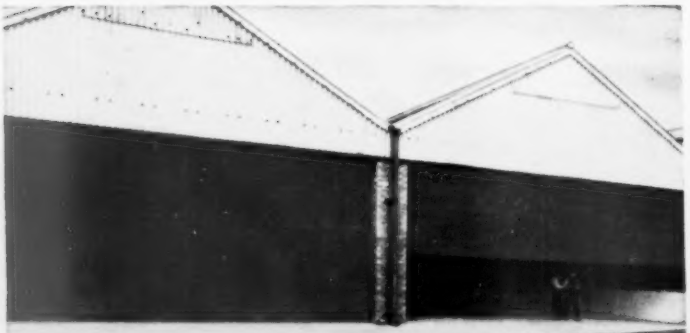
- **UNIVERSITY BUILDINGS–1**
  NEW SCIENCE BUILDINGS, OXFORD

- **B.A.S.A. CONFERENCE REPORT**

PUBLISHED IN LONDON SINCE 1854

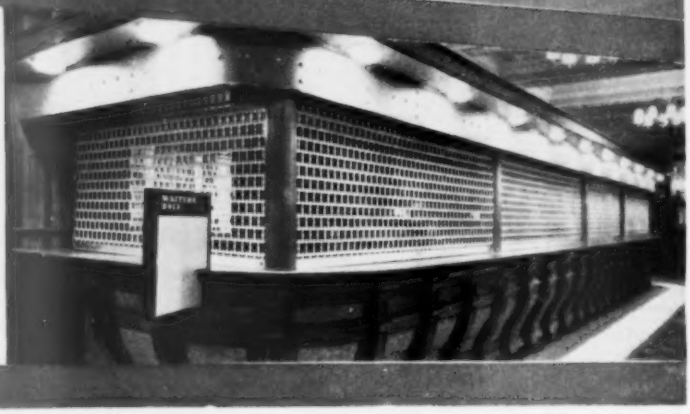
BRADY REGD.

roller shutters



sliding shutter doors

rolling grilles



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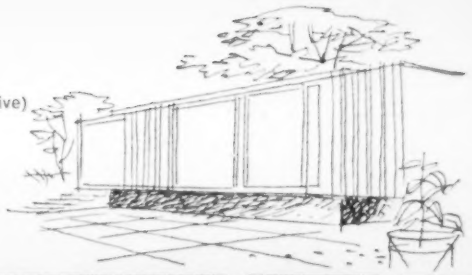
Stowe & Bowden

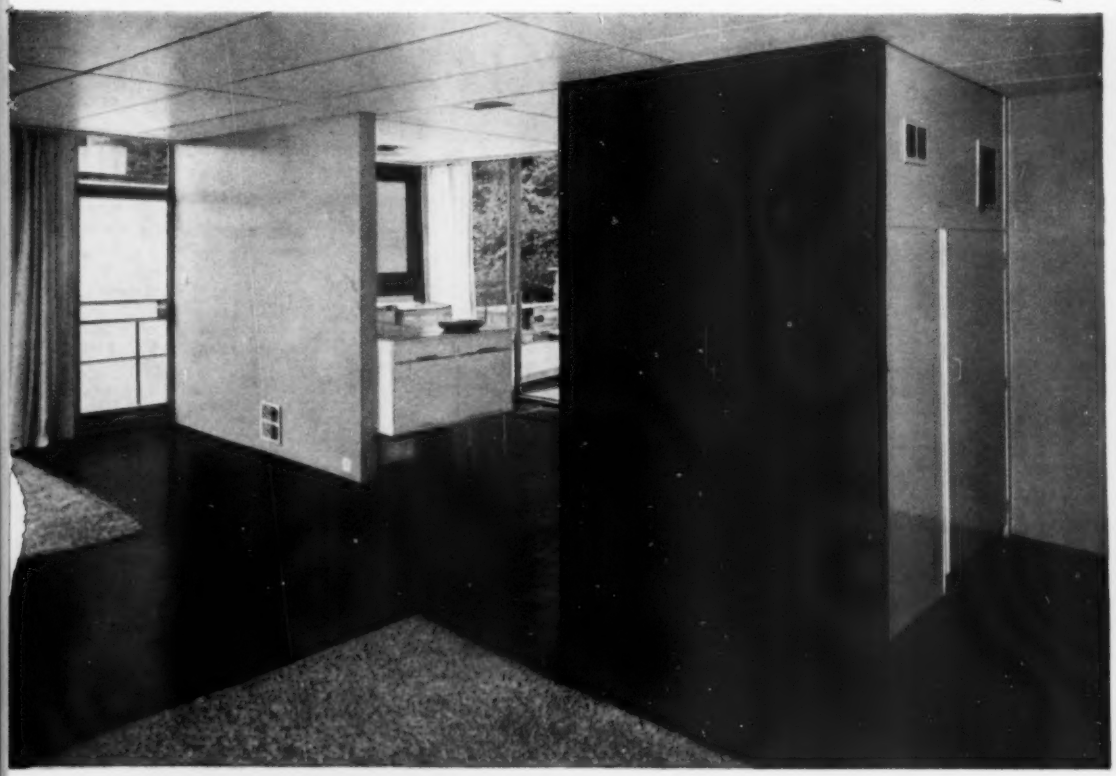
HOUSE AT BRANCH LANE, ALMONDBURY, YORKS,

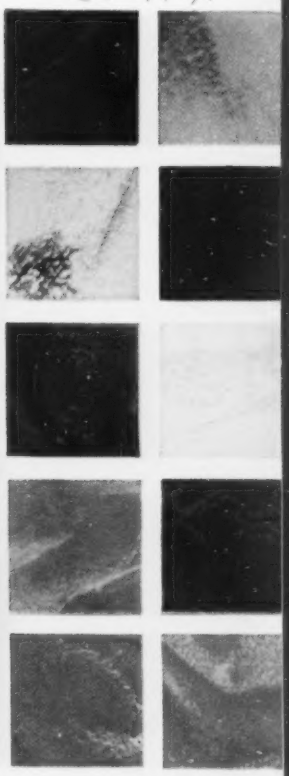
featuring Nairn Vinyl tiles. Photo: Mann Bros. (Courtesy Peter Stead of Design Collaborative)

'. . . the first of a series of projects in which the designers are attempting to create living environments using colour-space considerations. The spaces, inside and outside, are determined by planes of colour . . . These coloured planes interact, giving continuous visual rhythms . . . creating a system of chromoplastic relationships and spaces that is clear-cut, yet tranquil.'

ARCHITECTURAL DESIGN, July 1959







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give you 19 planned colours to simplify colour-matched design

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The colour range shown here is based on the experience of our French factory, whose range has proved most popular with Continental designers. All 19 colours are available in the 2.0 mm domestic tiles (9″ x 9″). In the heavy-duty 3.2 mm tiles (9″ x 9″ and 12″ x 12″), there are 5 colours in the Contractors' Basic 'A' Range and a further 6 in the Architectural Design 'B' Range. Within each range, every tile is the same price: you can quickly and accurately cost up any installation

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LONDON EC1: *131 Aldersgate Street. Monarch 3211 (8 lines).*

BIRMINGHAM 2: *65 Temple Row. Midland 5989 (2 lines).*

BRISTOL 4: *349 Bath Road, Bristol 77840.*

MANCHESTER 1: *4 Canal Street. Minshull Street. Central 1417 (3 lines).*

GLASGOW C5: *113 Centre Street. South 1011 (3 lines).*

NEWCASTLE-ON-TYNE: *41 Grainger Street. Newcastle 22807.*

A

DESIGN

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EXCLUSIVE
PRACTICAL

MAKES A SUCCESS OF SHIRES UNI-LYNX

THE CISTERN Clean and contemporary, made of black Duranite (or Keramic ware in a choice of colours) and fitted with flush-at-a-touch mechanism – quiet, powerful and unfailing.

THE WASH-DOWN PAN Available in white Keramic ware (or coloured to match cistern). 'Hydromatic Action' system of ducts and channels directs water to right places for controlled maximum efficiency. Trap to BSS.1213 dimension eliminates risk of blockage.

THE SEAT Shires famous 'Continental'. Slim, strong, flexible – no buffers. Cover available in choice of ten colours.

THE FITTINGS Chromium-plated, all brass supply fittings – incorporating Shires registered design volume control valve.

Installation of the Uni-Lynx is easy. No flush pipes or brackets required. Cost is surprisingly low. From every point of view, the Uni-Lynx is today's most outstanding design in close-coupled suites.

Full details from **DIVISION S4 SHIRES & CO. (LONDON) LIMITED GREENBOTTOM WORKS, GUISELEY, YORKS** and at
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The whole new range, now in sheets 9′ x 4′ as well as 8′ x 4′, thickness $\frac{1}{16}$″, is *always available* in matt and gloss finishes—plus new wood veneers that really do look like wood! Write to the address below and ask for facsimile Colour Chart and list of Distributors.

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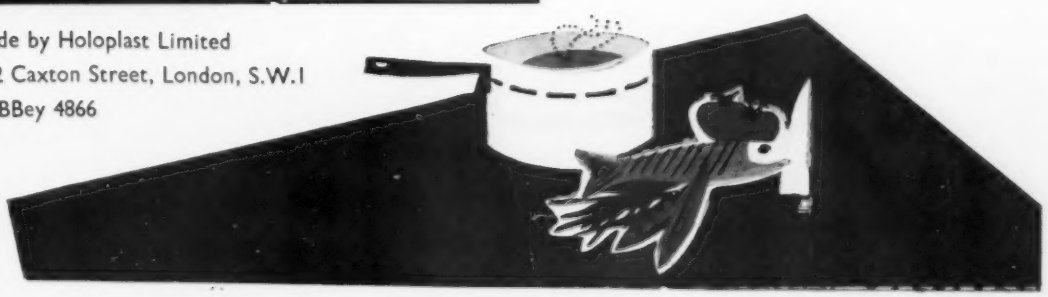

Reed PAPER GROUP

"Your attention appears to be wandering, Abercrombie"

"I was just looking at the new houses, sir."

"But, surely you've seen new houses before?"

"Yes, sir, but Boots are building these, sir. That's why they're going up so jolly fast. My father says if everyone built houses as fast as Boots, there jolly well wouldn't be any shortage. Same goes for factories, sir, and schools and hospitals and bridges and airfields and roads, sir. Boots build them all and lots more things besides. I'll bet there isn't anything they can't build quicker and better than anyone else, sir."

"If you knew as much about pitching tents, Abercrombie, you'd have been a patrol leader six months ago."

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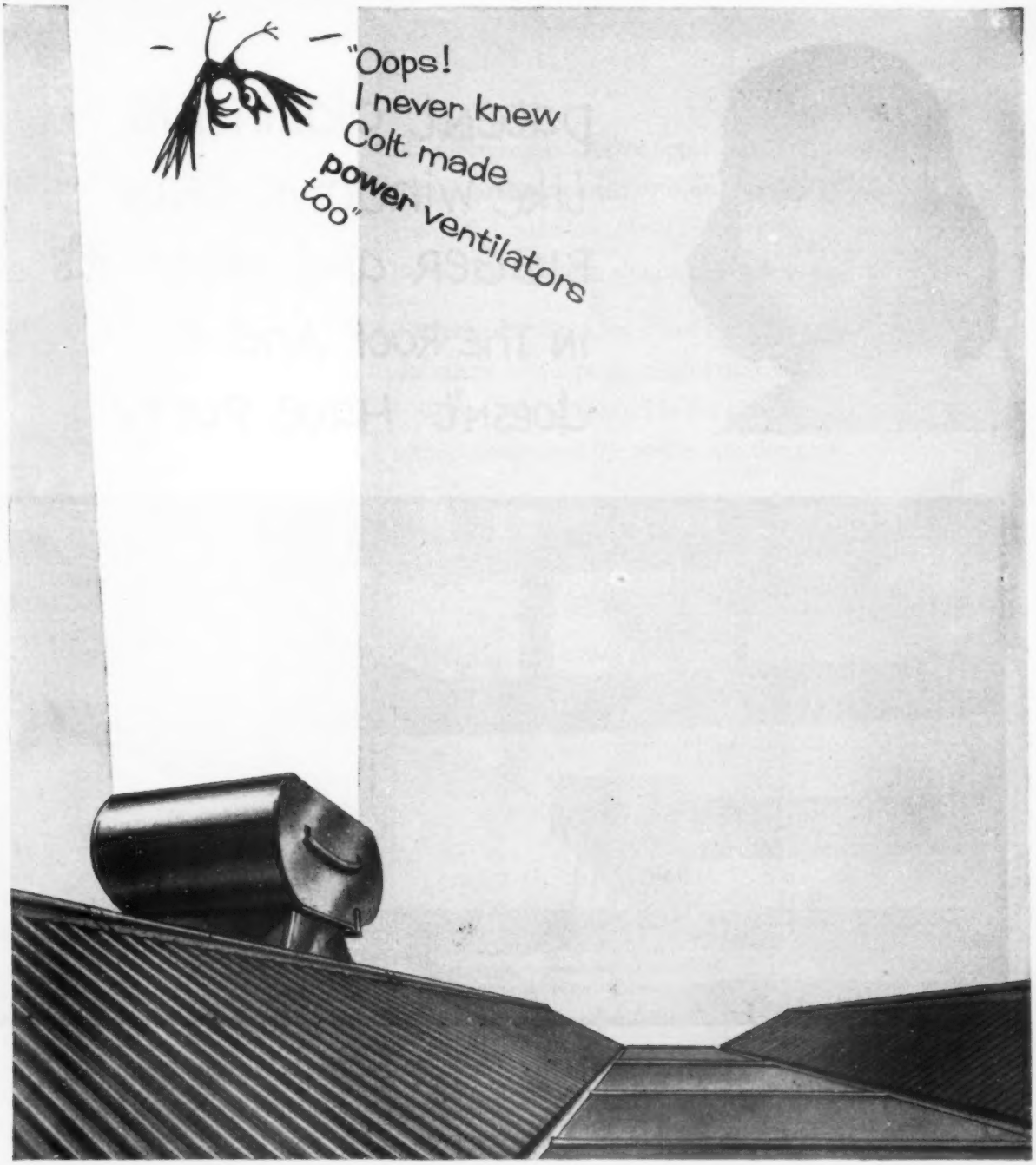

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B

patent glazing is like windows ONLY BIGGER and often it's IN THE ROOF and it doesn't Have PUTTY

The new Heinz factory at Wigan is the largest factory to be built in Britain since the war. Shown here is the ancillary can factory, clad in Williams & Williams "Aluminex" vertical patent glazing. The continuous opening lights are gear-operated to give critical control of ventilation.

Architects:
J. Douglass Mathew and Partners, London in association with Skidmore, Owings and Merrill, New York.

The new Heinz factory is turning depressed Wigan into a boom area. By the time it is in full production it will be employing some 3,000 local people and taking up a good deal of the local agricultural produce, which is both abundant and high in quality.

The 127-acre site has a gradient of 1 in 40 which has been exploited to give the factory two working levels—both accessible to lorries.

Manufacture starts on the upper level with unloading, storage, preparation and cooking. Products are then gravity fed to the lower level for can filling, sterilization, packing, warehousing and finally dispatch.

The presence of old coal mines underneath the site meant careful positioning of the component buildings. The can factory is therefore at some distance from the food production unit

WILLIAMS & WILLIAMS ALUMINEX SIDEWALL GLAZING HAS BEEN USED TO CLAD

the service gantry which takes finished cans across to the main factory for filling

and the covered footway connecting the two factories.

and is linked to it by a service gantry which feeds the finished cans into the appropriate stage of production process.

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General view of fabricating plant at Trafford Park

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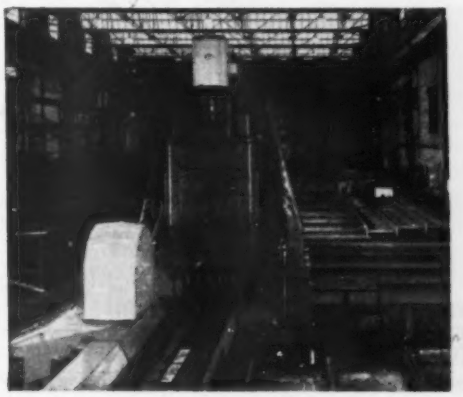

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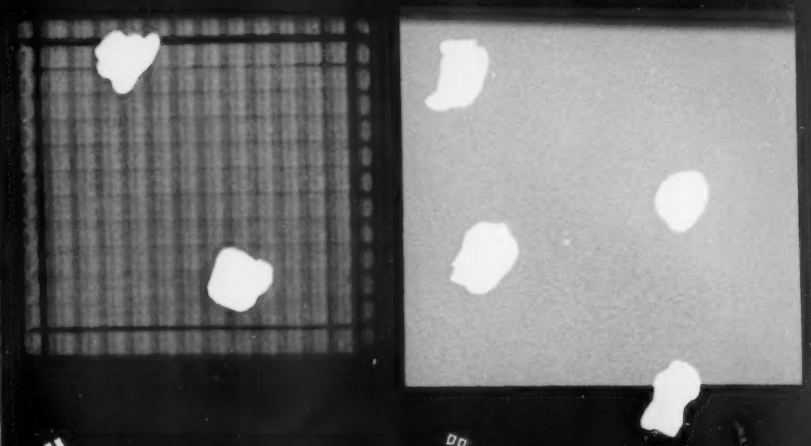
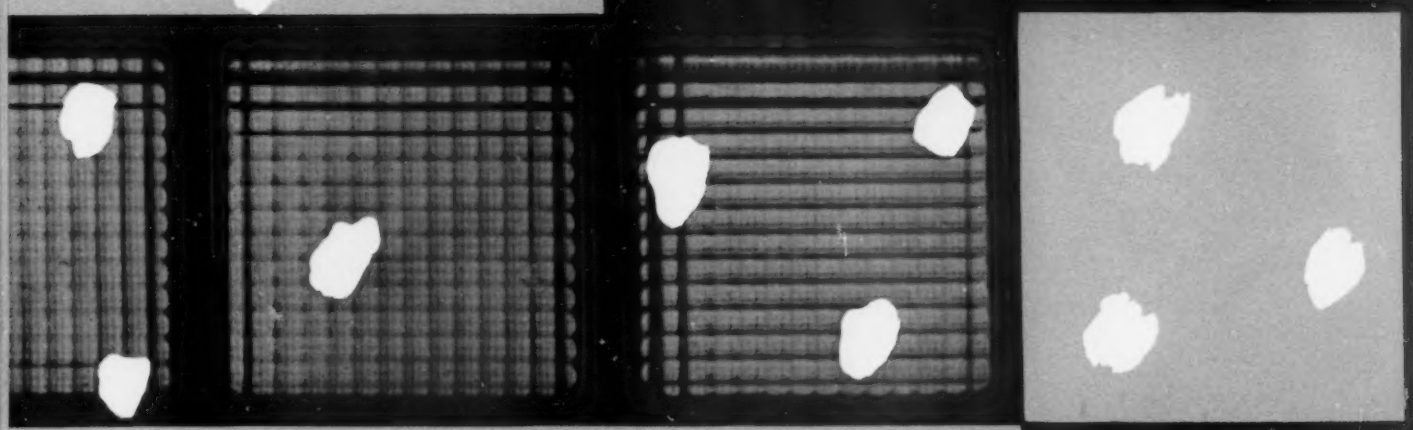


"INSULIGHT"

Hollow Glass Blocks have 'U' value of 0.44 B.t.u./ft.²h deg.F.



The thermal transmittance of "INSULIGHT" Hollow Glass Blocks is 0.44 B.t.u./ft.²h deg. F., which gives heat insulation equivalent to a 9 inch Fletton brick wall. This value was obtained from measurements made on a Glass Block panel under actual exposure conditions on a north wall. (Report No. 569, Reference B.R.S. 36/12/16B.)

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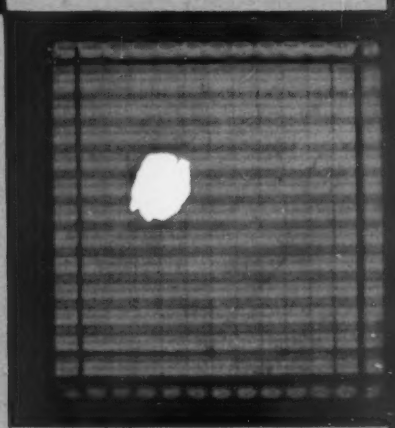
"INSULIGHT" *is a registered trade mark of Pilkington Brothers Limited. Supplies are available through the usual trade channels.*



"INSULIGHT"

Hollow Glass Blocks

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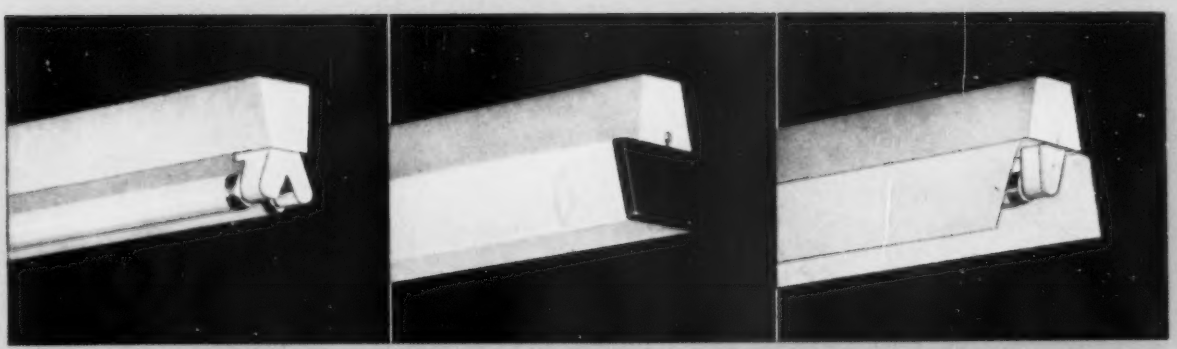

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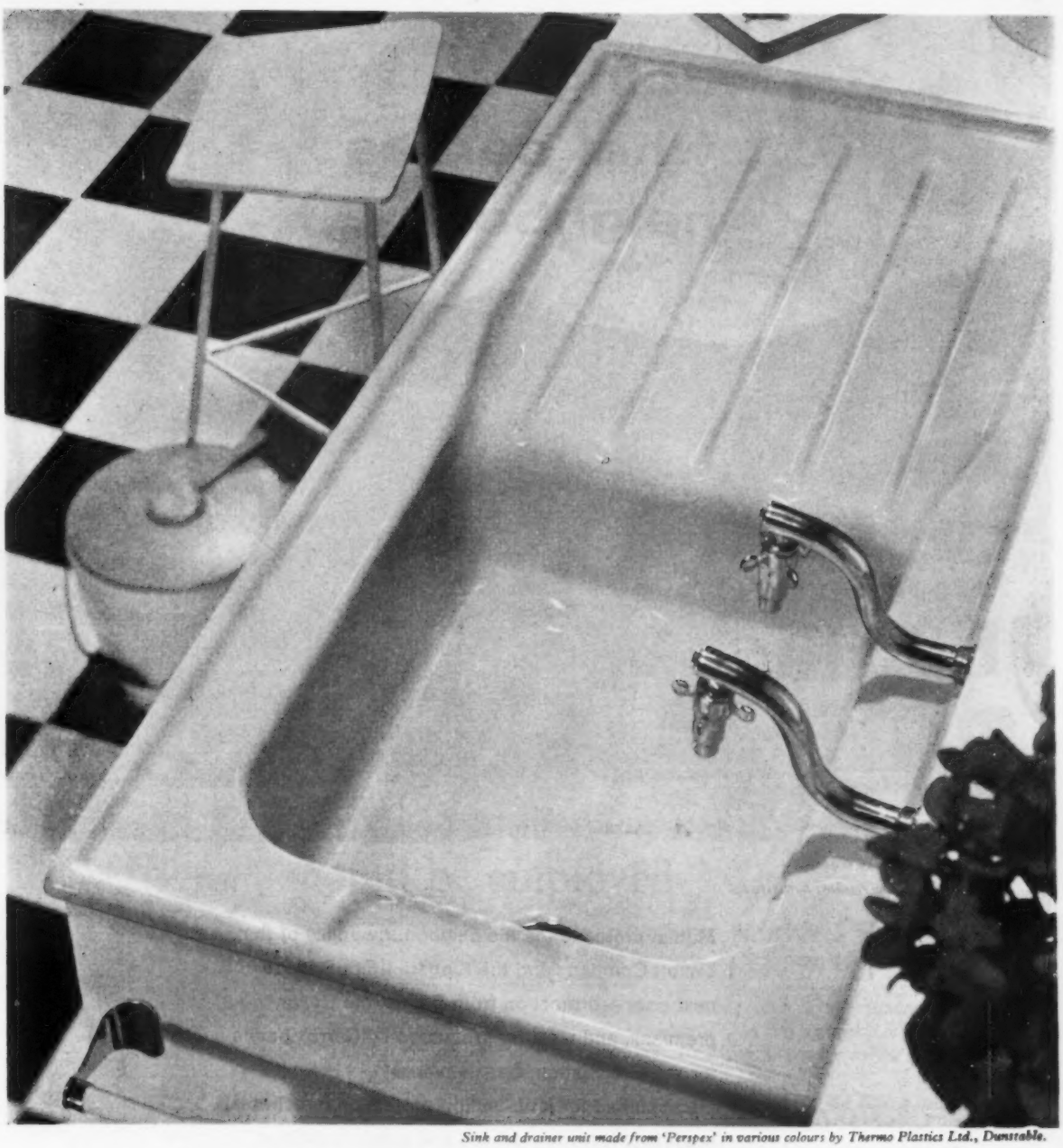

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SINK and drainer units made from 'Perspex' acrylic sheet add beauty, cleanliness and colour to today's kitchen. So many leading manufacturers are using this outstanding plastic material for sink and drainer units—manufacturers like Thermo Plastics Ltd., Dunstable, whose unit is illustrated above.

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'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

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ICI

P.724

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County Architect: J. Harrison, A.R.I.B.A.

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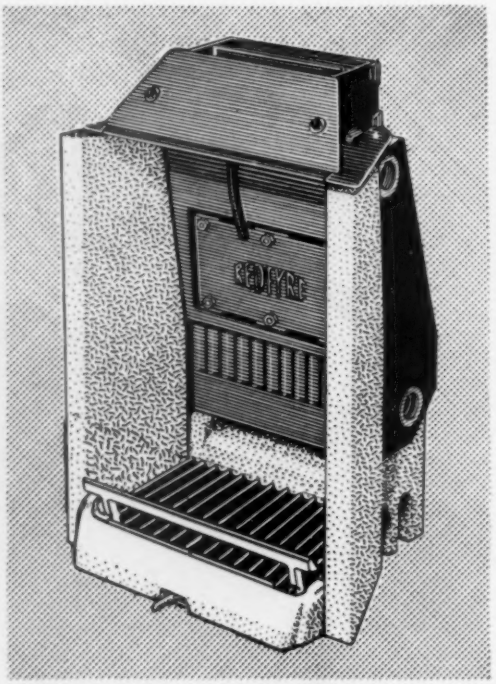
Redfyre 60



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REDFYRE

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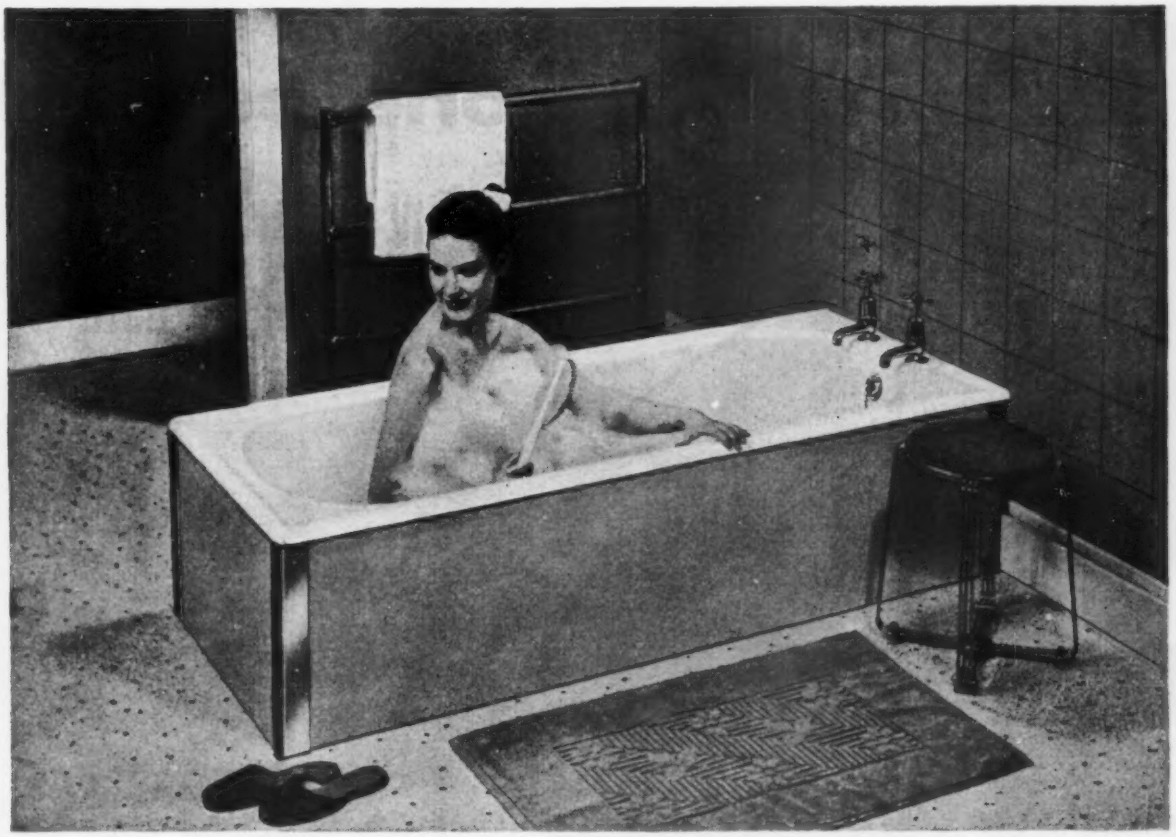

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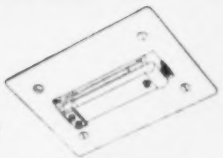

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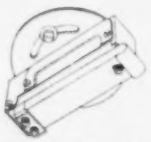

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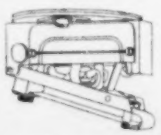

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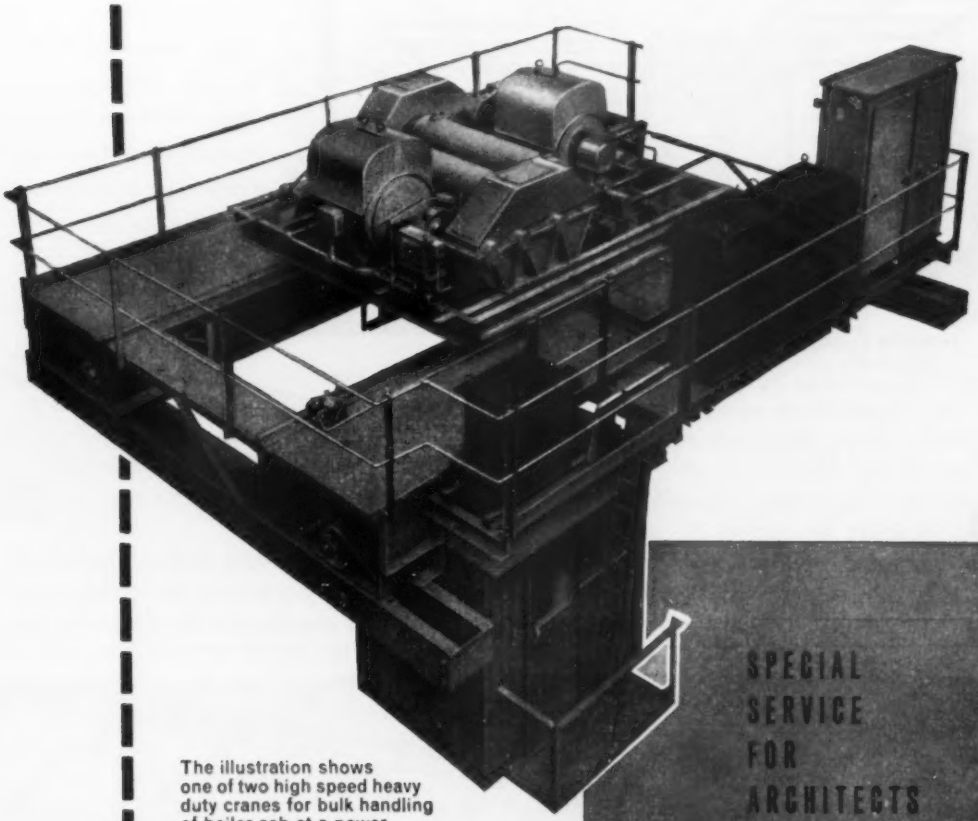

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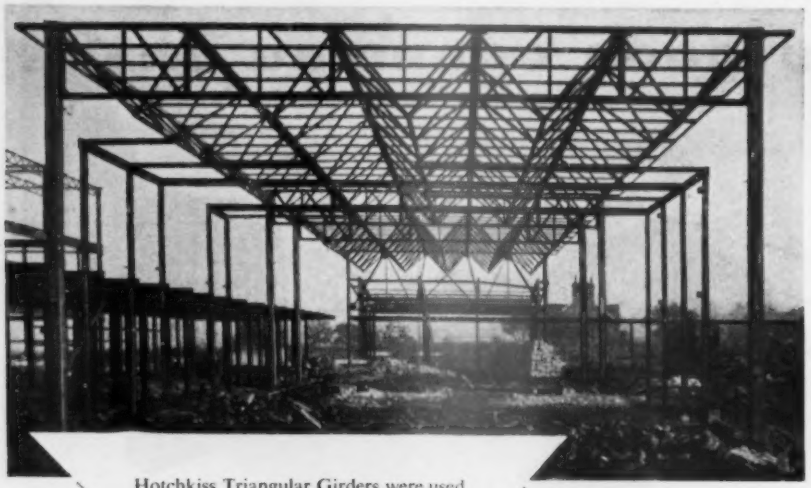

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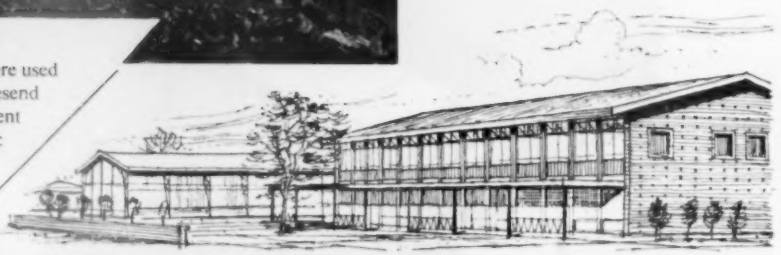

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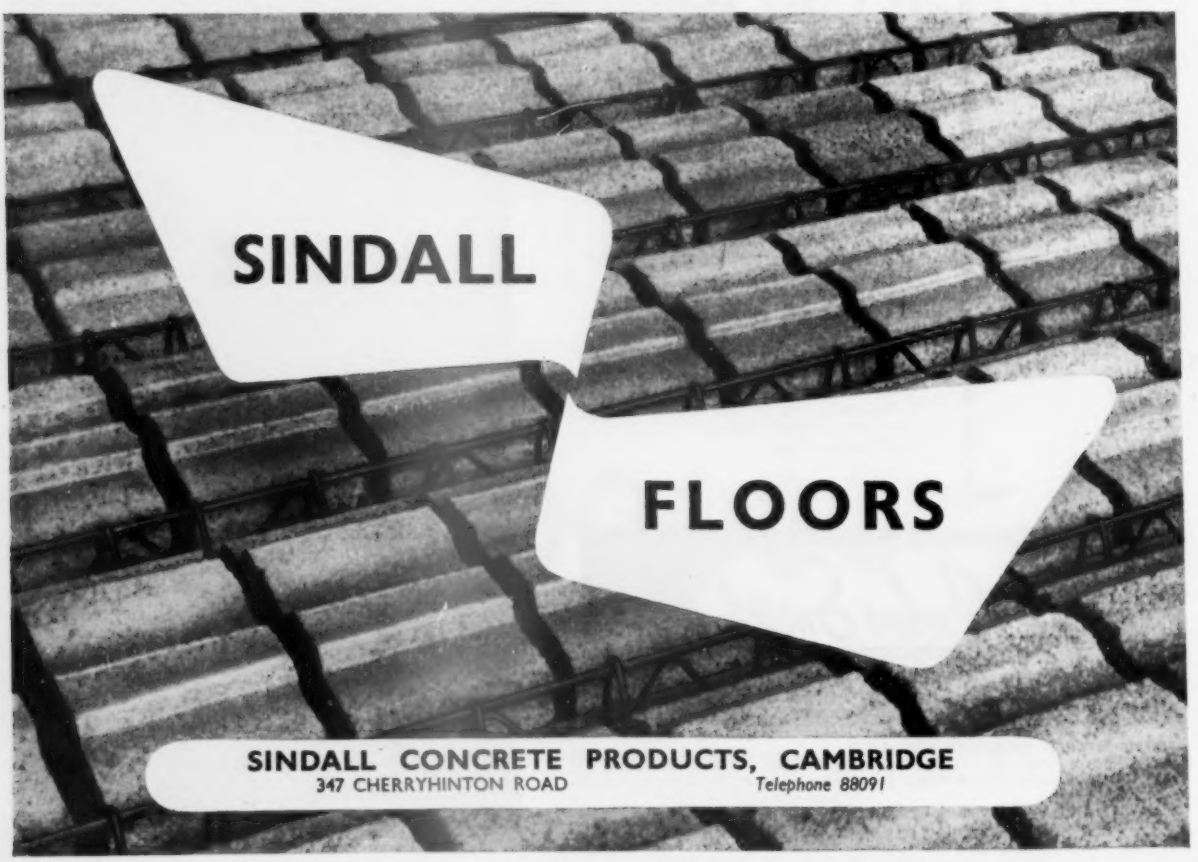

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Vol. 217 No. 3

THE ARCHITECT & BUILDING NEWS

20 January 1960

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BRAVO, MR. MARPLES!

TO judge from a speech he made in Washington last week, Mr. Marples has begun to draw some firm conclusions from his fact-finding tour of other people's road systems. He obviously intends to profit not only from the successes of the Americans, but also from their equally monumental mistakes.

The ruthless way many American cities have been shattered by the introduction of vast overhead ways and crossings, which have completely destroyed the amenities of whole districts without apparently solving the problem, is now common knowledge. The danger was that we would be led away by the very boldness of these projects and attempt similar schemes in our towns in the wrong way and the wrong places.

Mr. Marples will have none of this. He is against "tearing out the heart and soul of London by erecting overhead slabs of concrete such as overhead roads". He is, however, in favour of overhead pavements and perhaps we may expect him to give positive encouragement to the extended use of large-scale, upper-level shopping areas which have been referred to many times at the Monico inquiry.

He wants a better use of existing roads and was impressed with the American technique of traffic lanes in streets, the abolition of what to us would be the right-hand turn, and the employment of traffic wardens (possibly retired policemen) to "ticket" cars for parking offences.

It is clear that one of the quickest and cheapest ways to ease the congestion in town centres is the large-scale building of multi-storey car parks. If we could completely clear away the parked cars from the roads in central areas, we should effectively double their capacity. And, if we took the further step of severely restricting loading and unloading to off-peak periods we should quickly transform the present critical situation. This would give a much needed breathing spell in which to design and build major schemes of road widening before the rising tide of more and more cars once again threatened us with paralysis.

The success of the pink zone parking scheme showed the extent to which the central area problem is amenable to firm restriction combined with an increase in parking facilities.

What we need now is a programme for building multi-storey car parks, to be subsidized by the Government and operated by some public or perhaps semi-official body, if not by private interests. A few multi-storey parks are already building or in operation, including the new auto park in Birmingham, but hundreds more are needed. Car parks are never likely to be attractive financially, but the cost of subsidizing them on a large scale would only be a fraction of the vast sums needed for new road works giving comparable benefit.

Roads are meant for movement. We can no longer afford the time-wasting lunacy of allowing them to be choked by cars which should be stored in proper containers. Possibly one of the best single steps Mr. Marples could take would be to hammer the reluctant Treasury into the plain common sense of spending an adequate part of road fund to help in the erection of these car parks.

D

EVENTS AND COMMENTS

VISITORS' YORK

January is hardly a month for tourists in this country, but I found myself being one in York last week. I had less time than even the fastest moving American would have required and as a walk round the walls would have frozen me to the marrow, I kept indoors. This meant that I came away without that feeling of having fixed the city's monuments topographically. I saw enough, however, to determine me to go back in the spring, for at present York is the unspoiled cathedral city. It is as Canterbury was when I was a child; and there is virtually no through traffic at its centre.

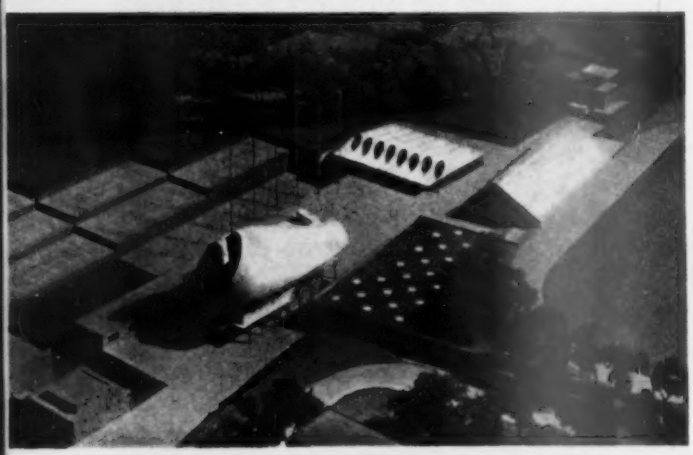
To begin with, York has a fine railway station, far larger than one would have thought necessary, and with a double vaulted roof curving majestically over what is claimed to be the longest platform in the country. The large and newly painted Royal Station Hotel adjoins and you can be admitted to it direct from the platform if you care to ring the bell. The main front of the hotel, looking at present onto a January-gaunt formal garden, has a splendid view of the Minster, rising from the medieval jumble of the old city. The city walls, well preserved, curve away on the right and partly hide the great pile of the railway offices, the roof and chimney stacks of which, at least, are reminiscent of Norman Shaw. Until recently this huge building was entirely heated by open coal fires, and each morning its landings were stacked with filled coal scuttles. The city streets are, for the most part, narrow and friendly and the shops seem to have escaped the modernization and loss of intimacy which are now almost universal. It is still a cosy city where I feel sure you can find warm teashops in which to eat endless buttery crumpets and, without doubt, Yorkshire Parkin. The Minster, its west front half covered in scaffolding, stands vast and square in a charming precinct of very old houses served by narrow lanes and alleyways. Its fabric seemed to me to be much in need of repair. Inside, the overall impression is of the tremendous width of the nave and choir and the completeness of the neat cruciform plan, beyond this the incomparable stained glass dominates everything. Here, far more time was required and a brighter day too. The astronomical clock in a case by Sir Albert Richardson, placed there as a memorial to allied airmen, seemed to me to be quite out of keeping.

The castle museum is housed in what used to be known as the prison for females. It was designed by John Carr, whose bust by Nollekens can be seen at the foot of the stairs. It consists of what must be one of the finest collections of bygone everyday things in existence and includes furnished rooms complete to the smallest detail of life at the time and every type of domestic ornament, gadget, amusement and relic from candlesticks to clay pipes, and from teapots to Valentines. The high spot is a street of shops, many from York itself, with their windows dressed with suitable contemporary goods. There is a grim police station, a post office, a coach house containing a fine mail coach, a sweetshop complete with the moulds for making sugar pigs and other delicious confections, and the gig in which Dr. J. L. Kirk, of Pickering, the founder of the collection and museum, used to do his rounds. To see this delightful display properly would take many visits. The street of shops is formed in what used to be the exercise yard of the prison, now roofed over. As you walk round you are reminded from time to time of the building's former inhabitants, and in particular by the padded cell which has been left untouched.

There are many other important things to see in York, including the debtors' prison, equipped with workshops of early industries, the very distinguished art gallery, many fine churches and the halls of the various trade guilds which flourished in the city. All these I left until the next time.

I feel a little anxious for the Shambles, the street of the butchers, where now there is only one butcher practising. The corporation has the restoration in hand, but I fear it will become, like the streets of Toledo, a hollow, tourist-packed shell of trinket shops. This, I suppose, is the inevitable fate of the curious and picturesque in these days of hygiene and supermarkets.

Model from S.E. overlooking new refectory for Birmingham University and showing swimming bath poised above entrance forecourt and barrel-vaulted roof to sports hall beyond. Architects: Chamberlin, Powell & Bon



CORBY COMPETITION WINNERS

Congratulations to Enrico de Pierro, Nigel Farrington and John Dennys on their success in the Corby Civic Centre Competition, illustrated in last week's issue. This is de Pierro's second major success in competitions. He won the Poole Technical College contest in 1951. De Pierro, Italian by birth, was educated, and, until the war, lived in Canada. He served in the Royal Engineers during the war and then settled in this country. He was, for some years, on the staff of the A.A. School, is the glass of fashion and the mould of form, always ebullient except when in the depths of inspissated gloom, and plays the harpsichord. Nigel Farrington built his own house out of a detached billiards room, stable, garage or hen coop and adds a room as the family grows; changed his car from left-hand drive to right in order to get a better price for it; wants to build a boat in his living room; was a Bombay sapper and miner during the war and trained at the A.A. John Dennys comes from a long line of Indian Army soldiers; won an M.C. in Italy, in the Gurkhas; was trained at the A.A. and later, after serving as the principal's administrative assistant, became first-year master.

ABNER

Previous reports were published on December 23 and 30, 1959; January 6 and 13, 1960

MONICO SITE INQUIRY—5

"It is a Negation of Tower Design"

THE report is continued with the seventh day of the inquiry and Mr. Jordan's evidence, in which he was discussing the architectural qualities of the proposed building.

Mr. Jordan said: "What I object to, Sir, is its solid geometry, its shape. It has no scale; it has no proportion. It is ill-composed, and it lacks clarity. There is no clear definition or differentiation in the tower and the podium. The tower seems to me to slither down to the podium, neither visually attached to it, nor detached from it. The various masses seem to me to be badly related to each other and (which I think is obvious) not related at all to any neighbouring building. In short, this building seems to be the negation of all those basic principles of architectural composition and design so admirably expounded to me by Sir Howard Robertson 32 years ago.

"I do not, in principle, disapprove of a tower on a podium, not as such in the right place. It can be a good formula well executed on a suitable site, and I could name cases where it is the developer's best solution of his problem, and it is satisfying architecturally—Castrol House, Thorn House, and the Lever Building in New York—but, as I have tried to indicate, a tower on this site is a rather special problem. The tower we are now considering is a very special problem indeed. The tower in plan has a very curious "U" shape, a sort of square "U", so that you see a number of facets, two of which, and almost three, are approximately equal and to each other.

"When you look at the tower you get these sides [witness demonstrated with a sketch] equal to the other, and this different, but not widely different.

"What I mean is if you have a tower of that shape on plan, this side and this side are equal. This side is not equal, but of not very dissimilar length. I think you, therefore, get, as you will do in architecture, an effect of dullness. Also, owing to the various angles at which this tower can be viewed, you can never get an effect of slenderness. Even in a slab block, where you have a great long side, you have the slenderness of its end, which gives you a verticality of proportion. [The witness held up a photograph.]

"What I am trying to lead up to, Sir, is this, that owing to that, and owing, indeed, to the whole way the tower is designed, it is a negation of tower design. I know in a sense I am contradicting myself, because I have argued that this sight requires a building of horizontal rather than vertical proportion, but admitting for the sake of the present argument, where I am dealing not with town planning matters but with the building itself, admitting that we have a tower at all, the essence of tower design is verticality."

The witness then pinned on the board an illustration of the applicant's scheme based on the photograph supplied to him at a press conference.

Mr. Jordan suggested a change in the podium line which he indicated.

Referring to it, he said: "We have one of the most extraordinary things in architectural history which is a square tower. In full perspective the width of the tower is equal to its height as measured from the top of the podium. Not in that perspective over there but a slightly more advantageous viewpoint has been chosen, but from many points of view it is an actual square which accounts probably for the number of times the word "squat" has been used in criticizing it. I maintain a square in itself is seldom a satisfactory proportion and for a tower it is an idiotic proportion. It is like the man who used to boast that he was the shortest giant in London. Nobody gets the slightest reward for the 165ft or whatever it is permitted to the developer—least of all, I think, the developers. I think this tower fails as town planning because it is in the wrong place for a tower. I think it fails as architecture because extrinsically it has no beauty, and it even fails as an advertisement hoarding because it has no drama in it.

"If a tower of this proportion is really necessary for cramming in all the lettable space, then there is only one conclusion, Sir, which can be come to: there must be no tower. One may ask: Could the difficulty be overcome? Could the tower, for instance, be made even taller—Sir Howard Robertson suggested two more storeys—outtopping Thorn House in St. Martin's Lane so that its proportion would be more slender. I have already given town planning reasons against this: Its rivalry with the County Fire Office.

"I have given town planning reasons against its rivalry with the County Fire Office. But there are other reasons. This tower is a hoarding as well as an office block. Neon signs in the Circus are one thing: neon signs twinkling out over St. James's Park to Downing Street and Buckingham Palace are another thing.

Student Support

In answer to a question from Mr. Elwyn Jones, Mr. Jordan read out the following letter from the chairman of the Architectural Association Students' Committee and its secretary:

"Dear Mr. Jordan,—On behalf of the Students' Committee of the Architectural Association School, London, we wish to inform you that the students of this school have approved unanimously the resolution.

"(1) We are not disapproving of a high commercial building on the Monico site, we do most strongly disapprove of the present design both as architecture and because it completely invalidates any sound comprehensive treatment of the Circus as a whole.

"(2) Moreover, any Government approval of architecture of this kind on historic sites can only lead to bitterness and disillusionment among young men and women entering the architectural profession. We have also communicated this resolution to the union, students' club or committee, as the case may be, of many schools of architecture."

The letter attached a list of schools of architecture supporting the resolution and Mr. Jordan said that apart from the Regent Street Polytechnic, all the R.I.B.A. recognized schools of architecture had signed the letter. Mr. Jordan then read out a letter from the British Architectural Students' Association, supporting wholeheartedly the A.A. student letter.

Cross-examined by Mr. Ramsay Willis, Mr. Jordan agreed that development of the Monico island site presented very many very difficult problems for the architect. He said he did not think an architect could be found to produce a horizontal scheme from the present site with the full plot ratio which, he considered, was excessive; something had got to be given up to the public interest.

Later in cross-examination by Mr. Willis, Mr. Jordan agreed that the whole thing should be thrown back into the melting pot. When Mr. Willis asked who his choice of an architect would be, he suggested a most admirable person would be Sir Leslie Martin of the University of Cambridge, because of his high academic standing and

MONICO SITE INQUIRY

his long practical experience as a former chief architect of the L.C.C. Answering further questions, Mr. Jordan said he simply could not envisage a successful vertical design on that particular site.

Cross-examined by Mr. Stewart-Brown, Mr. Jordan said that on a historic site in the centre of a great capital, it was a responsible attitude for a public authority to refuse an application from a particular firm of architects on the grounds that their work was below standard. By approving a design which invalidated their own scheme for development he thought the L.C.C. had produced a greater volume of criticism than they would have done if they had insisted upon a design by an architect of higher standard.

Later in cross-examination, Mr. Jordan said a bridge of 20ft with steps down either side over several of the main streets leading into Piccadilly Circus would look attractive. A modern reinforced concrete bridge with graceful curves on the underside could be enormously attractive, a large-scale, modern version of Venetian bridges. "A sort of Bridge of Sighs" interjected the Inspector. "Somebody suggests the *pons asinorum*," replied Mr. Stewart-Brown.

Cross-examined by Mr. Bell, Mr. Jordan agreed that he was not opposed to a building designed to carry advertisements on a specified panel or panels.

Eighth Day of the Inquiry—Thursday, January 7

Mr. Elwyn Jones, Q.C., appearing for the Civic Trust, called Dr. Thomas Sharp as his first witness of the day.

Dr. Sharp contended that not only should the present application be rejected, but it should be made plain that no further applications should be approved until a plan for the redevelopment of the Circus as a whole had been settled. Personally, he considered that to satisfy pedestrian needs, especially so that the Circus might fulfil its traditional and useful function, Piccadilly might well have to have far more radical treatment than anything that had so far been mentioned at the inquiry.

Dr. Thomas Sharp's Plan

Producing a plan to explain his ideas, Dr. Sharp suggested that the line which in the present scheme cut off part of the Monico site should be carried along eastwards to provide a frontage to the Circus of twice the length which was now provided by the new Monico improvement line. He thought that would enormously strengthen the wallage of the square; the sense of enclosure, which was an essential feature of any square. He suggested that as the L.C.C. resources were fully committed in the great schemes at the Elephant and elsewhere then, important though those schemes were, the future of Piccadilly Circus was even more important. Therefore, he submitted, the phasing of those other schemes should be adjusted so that Piccadilly could be dealt with as a major priority.

Even if the Minister did not accept the contention he had just advanced, Dr. Sharp continued, he still thought the application should be rejected, because, as an individual structure, the proposal was highly unsatisfactory, and would seriously contravene principles of good planning. Dr. Sharp would not express his opinion on the architecture, as he said, in his evidence, he was dealing wholly with planning matters. He submitted that neither this building nor any building of similar height or massing could be other than disruptive in this situation. He thought the height and bulk of the present proposal would perform no good public service in its situation. On the contrary, it would be bound to detract from the proper composition of any reorganized Circus. It would be overdominant within the Circus of a large area around, or it would be, at least, until other developers claimed similar rights and the city scene became a complete anarchic medley of tower buildings of all shapes and sizes. Since neither its daylighting nor its floor-planning were either in themselves improved by going high, the only real purpose was to gain advantage over its neighbours.

Dr. Sharp thought, that as good daylighting could be obtained by a building design in the more normal horizontal way to a height of, say, six floors above ground, that is to say, to the height of the County Fire Office and Swan & Edgars, or just a little above them, he could see no defensible argument either in architecture or normal building function for "this great self-assertive bulk roaring in this place".

On the proposed scheme, Dr. Sharp said: "The main consideration has been how to acquire the maximum amount of space for the display of advertisements. The building in other words is a 13-storey tower hoarding. I submit that that is an unworthy motive for building anywhere, and in spite of the Circus tradition of bright lights, it is even more unworthy here than in most places. To propose a display of night and day advertising rising to a height of 156ft seems to me to be deplorable and indefensible except for private profit at public expense, which is not a good ground for permitting it under town planning."

Continuing, Dr. Sharp said that advertisements should only be visible, in his opinion, within the enclosure of the street or square where they were displayed, or, unavoidably from the streets entering them. That meant that at the most, they should not rise above the general building level of these places. He thought that where the general building level was high, advertisements should be kept down below the general level of the upper storeys.

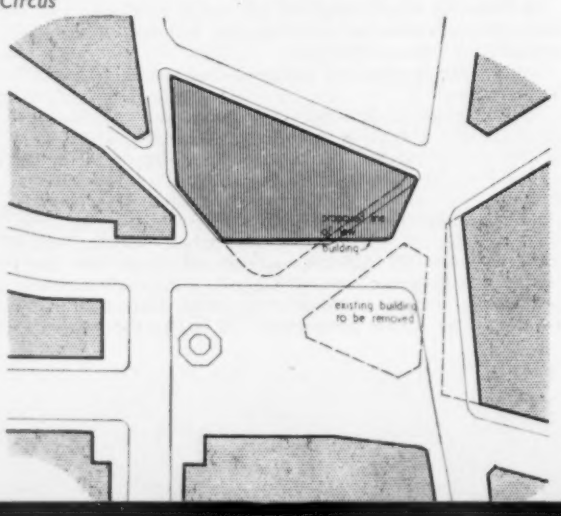
"Perhaps," he said, "the upper permissible level might be spoken of as pedestrian view level."

Dr. Sharp Cross-examined

Cross-examined by Sir Milner Holland, Dr. Sharp said he did not accept the L.C.C. scheme. It had not been before the Minister before, and he hoped that the Minister would have a completely new look at it. Referring to his own sketch, Dr. Sharp agreed that it would give additional space to the east which would compensate for the loss of land by reason of the intrusion of the Monico site into the Circus. The difference between his plan and the L.C.C. advisory scheme, as far as traffic arranagements were concerned, was that he took into the Monico site a piece of highway which could not be splayed in.

On the subject of enclosure, Dr. Sharp said there would be no sense of enclosure with the proposed scheme because you had a complete leakage of sky coming down the side of the tower-like building. If you got that and

Diagram showing Dr. Sharp's suggestion for extending the Monico site (hatched) eastwards, thereby compensating for the loss of land taken into the Circus on the south frontage and improving the entrance of Shaftesbury Avenue into the Circus



other much higher buildings which the L.C.C. were suggesting you would be getting something so fantastically out of scale with the comparatively small Piccadilly Circus that the place would become reduced to something in the nature of a backyard.

Cross-examined later by Mr. Stewart-Brown, Dr. Sharp said he disliked high tower buildings in that situation. He considered the L.C.C. should be asked to submit a further scheme for Piccadilly Circus.

Questioned by the Inspector about the possibility of overgrounding the pedestrian traffic instead of undergrounding the motor traffic, Dr. Sharp said he saw great difficulties in applying the idea of walkways to a limited area such as Piccadilly, in an existing city, which had to be developed piecemeal even if it was the subject of a comprehensive plan. It was an idea which might be worked in an entirely new city, but he saw very great difficulties.

Sir William Holford's Evidence

Sir William said he was speaking simply as a member of the Royal Fine Art Commisison (as distinct from speaking for the Commission), but he thought it was right to say he had discussed his points with the chairman of the Commission. He thought that when they had heard his brief evidence they might agree it would in fact be quite inappropriate for the Commission to give evidence. In fact, they had not done so since it was appointed in 1924.

Sir William said that when he saw the developers' proposals at the meeting of the technical committee of the Royal Fine Art Commission on February 11, 1959, his own reaction was simply one of disappointment. He knew Mr. Jack Cotton was one of the most considerable *entrepreneurs* of his day and he thought he would have provided a more brilliant firework display than the present scheme. He hoped he would still do so. He thought he was entitled to say, in view of the way in which the (R.F.A.C.) secretary's letter had been taken since, that two conditions were taken for granted, which did have the effect of toning down the more drastic criticisms of the Commission. The first was that the planning authority had already, in principle, agreed to the uses and the volume of building on the site. The second point was that it was no part of the Commission's responsibility to protest against advertising in Piccadilly Circus. On the contrary, their duty was to express the hope that whatever was newly built there would be good of its kind.

Sir William thought it was right to say that all the members present on that day felt that the scheme, as it then was, did not have the quality of civic design which Piccadilly and the quadrant had at the moment, nor did the scheme have the exhilarating showmanship of the kind of illuminations which were there now.

Sir William continued: "Out of the two or three hundred more important projects that come before the Commission in the year, the majority do come more than once, because they are carried further and amended after friendly discussion. Even the most formal of the Commission's letters, either to designers or to local authorities, or both, are not couched in terms of condemnation while the design was still under consideration. The Commission, of course, only learned later, through the Press, that the L.C.C. had rejected their advice in regard to the advertisements, but they were considering it in regard to the podium. The scheme was not submitted to the Commission again, although the Commission themselves had looked at the site and discussed its possibilities again in November/December, 1959.

"What influence the Commission has," Sir William continued, "arises first from stirring the artistic conscience of the designers in cases where the public interest seems to demand it in the Commission's view. Therefore, between the February letter and the statement by the Commission on December 15, the position had changed in a number of ways. In the first place the scheme itself had been further detailed, altered and extended. It was now final, and it had therefore passed beyond the stage in which further discussion by the Commission would be useful or even possible.

"The Commission also realizes, I think, or the Commissioners did, that there must be, after all, alternative solutions to this very difficult problem, and there was not only one way of developing this site."

Although the Commission were impressed by Mr. Frank Booth's presentation of the design, Sir William did not think it found any fundamental alteration in it. As the whole matter was about to be thrown open to public comment and as the Minister had said he would seek the Commission's views independently, the Commission thought it best to make them known fully without reservations. "To have done less," said Sir William, "after all, would have implied that the Commission regarded this as a suitable pattern for future development for what has been called, I think, by the L.C.C.'s own Town Planning Committee, the world's best-known town centre." Sir William agreed he was a party to the letter to the Minister of December 15, 1959, from the Commission, and he agreed with it.

No Positive Civic Design

Sir William did not think that in this case of Piccadilly, the developer could be blamed in anyway for trying to secure the maximum floor space and the maximum advertising space which the site would allow. He thought it was the system which was at fault here.

Sir William said it seemed to him that one of the things that was missed out of development under the present Town Planning Act was the positive and constructive side of civic design or public development. Things like strolling space, escalators, promenade decks, traffic bridges, vantage points, embellishment of all sorts, right down to mundane things like seats, public conveniences and so on, tended to be left out of a scheme which was neither carried out completely by one developer nor carried out completely by the public authority.

Sir William said he entirely agreed with Mr. Bennett and Mr. Howard Robertson that it was no use dreaming up the style and fashion of buildings around the Circus which were not yet built, and whose exact uses and ownership we were not aware of, but he felt that public aspects of a comprehensive scheme were absolutely essential and they must be adopted. He thought the essence of a comprehensive scheme was that it should be flexible, in that it opened up opportunities for individual clients and designers to embellish it, to improve it and to fill it out, but he did not think it could be flexible in regard to things such as traffic.

Sir William thought that advertisements going right up on the building line to the height of the proposed building precluded any enjoyment of the movement which the advertisements appeared to have round the Circus which you got from the top of a bus as you came down the quadrant.

Sir William Cross-examined

In his cross-examination of Sir William Holford, Sir Milner asked: "Do not you think that it is most unfortunate that when the Royal Fine Art Commission were consulted in February, they did not then say: 'In our view the whole architectural handling of the project is not up to the standard required for such an exceptionally important site'?" Sir William replied that he thought, as it turned out, it was lucky that the Commission did not say so, for what he was there to give evidence on, was the fact, that they were not called upon to make that kind of statement at that stage. He entirely agreed with Sir Milner, that it was unfortunate from the developers' point of view, and it may have been unfortunate from the L.C.C.'s point of view that they drew such conclusions as they did draw from the Commission's letter of February 17, and that that letter was not in fact more critical.

Later, Sir William, in answer to a question, said he was endeavouring to refute the imputation that the Commission

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deliberately, so to speak, accepted the scheme at one stage and condemned it at a later.

Sir Milner asked Sir William whether he had seen the leading article in THE ARCHITECT AND BUILDING NEWS, of January 6. He then quoted the second and third sentences of the first paragraph of that leader.

Later, Sir Milner said that what still troubled him a good deal was why the Royal Fine Art Commission made a public announcement in November, that is to say, when the storm broke, the Commission, having written letters of whatever character, then thought it necessary to make a public announcement of what they had written.

A Public Trust for Piccadilly

Mr. Elwyn Jones asked Sir William Holford whether he would elaborate a little more his idea of Government or private consortium backing for an overall plan in that area.

Trying to answer the question briefly, Sir William said that it seemed clear that the developer had sufficient capital for his purpose, and the L.C.C. had sufficient capital obviously to do this (redevelopment) on a small scale, but insufficient to do it over the whole area of Piccadilly, and over perhaps 20 and 30 areas of equal importance. Therefore, it seemed to him, that if some other money was to go into this development (it might be Government money, it might not) it was necessary to explore some such device as had been used by local government before. He referred to such very old committees in the Corporation of London, as the Bridgehouse estates and others, where the local authority and others who were co-opted for the purpose, formed, in fact, a public holding for the prosecution of the development.

Questioned by Sir Milner Holland on this, Sir William said he was aware that this idea of his could not be run under existing legislation.

Decorative Treillage

Mr. Stewart-Brown, appearing for the L.C.C., questioned Sir William about the advertisements. Sir William said it was perfectly possible to have an area of advertising free of the building, which is what he thought was intended in the Royal Fine Art Commission's first letter.

Sir William agreed that one way in which you could achieve a panel or height of horizontal character, carrying advertisements right round from Glasshouse Street into Shaftesbury Avenue, was by means of a structure in front of a building. He said he was not advocating anything because he was not designing the building, but it was one way in which it could be done. Another way, said Sir William, was simply to fill the gaps between the arms of the building, coming to the frontage with some form of decorative treillage which would itself carry advertisements, and then to use the blank panels at the ends of those arms to carry others. There were several ways in which you could, in fact, secure, with a tall building rising behind it, a fairly continuous and large panel of lights on the actual frontage of the Circus.

The Inspector had some questions to ask about the gaps in the sky either side of the design on the north side of the Circus, and the need for enclosure. He asked whether Sir William would be quite content to see those gaps enclosed with, possibly, a wall of coloured advertisements with the building rising up behind. Sir Willam said he was suggesting that those vertical types of signs which were fountain-light, up and down, could well find a place in the front along with the more fixed and solid types of advertisements. That would form a kind of background of city lights for that side of Piccadilly Circus which would provide all the enclosure that you need in a square of that character and would not preclude taller and slender towers of office building, as in fact the Thorn Building did now in St. Martin's Lane, rising up behind. He thought one of the great attractions in city centres in other countries was the contrast between the warm lively colour of the lights at pedestrian level and the thin but slightly more ghostly buildings rising up behind.

Mr. Richard Sheppard's Evidence

Mr. Sheppard said he thought that no single part of the site which comprised Piccadilly Circus should be developed without relation to the other sites immediately surrounding it. He himself had seen no designs for the south side of Piccadilly Circus which would in any way relate to the site with which the present inquiry was concerned. He thought a general scheme should be prepared which took into account all, not some, of the factors in connection with it.

Answering questions from Mr. Elwyn Jones, Mr. Sheppard said he regarded the Circus as an amusement and recreational centre entirely. In his opinion, owing to the general inaccessibility of the site and the danger of approaching any sites in Piccadilly, it would be better if offices were elsewhere. He regarded Piccadilly Circus as a circus, as the name implied, and if the building in question were erected in the Monico position, it would have the effect of turning Piccadilly into an axis and the whole of Piccadilly itself would lead up to this particular point.

Answering a question of Sir Milner Holland, Mr. Sheppard said, he would like to see a development in the Circus which would allow pedestrians a greater degree of freedom in using it instead of being cramped on the existing pavements; a better regulation of traffic in relation to pedestrians; and for the sake of traffic, he would prefer to see a great deal of it go round rather than through it, and a greater freedom of movement horizontally and vertically about the Circus.

Mr. Denys Lasdun's Evidence

Mr. Lasdun said he regarded the function of the Circus as an arena for people, and that required one really fundamental character, one of enclosure.

Answering a question of Sir Milner Holland, Mr. Lasdun said he was not saying whether the building should be tall or short. His definition of a building rising in an enclosure "was nothing less than 80ft share on the building line."

Earlier Mr. Lasdun said he thought it would be unsatisfactory if Piccadilly Circus was not considered as a whole either by comprehensive planning or by some other method, because unless there was a comprehensive image it was not possible to relate a design to Piccadilly Circus in the future.

Mr. David Aberdeen Called

Mr. Aberdeen said, because of its shape, various restrictions imposed and its position, the site demanded an inspired and inspiring solution to the problem. He felt that the proposed building showed an impoverishment of both heart and mind. "It is a greedy, tasteless, lumpy, clumping, squat lower on an amorphous podium," he said. The opinion which he wished to express was "please, promoter, scrap it, and start again." If you said please criticize it in detail, how, he would ask, could he criticize the wart on the hag's face. There seemed to him to be little to be gained by so much detailed discussion of minute matter bearing on the pros and cons of the development. It was a bad design—a thoroughly bad design—and he asked for it to be rejected.

Miss Jane Drew's Evidence

Miss Drew, reading a prepared statement, said: "For a building of this kind, the kind of regulations one would have expected might have been those which would ensure it would form part of an agreed total conception. For

example, the first-floor level, or whatever floor level it was, might have been fixed, so that the desired overhead pedestrian circulation was achieved, or, at all events, the first-floor level at points of interconnection with other parts of the Circus was required. It might also call for a very open form of ground-floor plan, allowing plentiful pedestrian circulation and first-floor circulation of a public kind with good convenient public access. I believe that the top cornice line in a public area like this should be fixed. The ideal answer would, of course, be for the design of the whole Circus to be in the hands of one architect who is fully responsible for and in charge of the whole thing."

Continuing, Miss Drew thought the plan form should be "that of a piazza, rectangular, square, oval or round or whatever people liked, in three dimensions, forming, as it were, an open-air room, well proportioned." A tower might form part of that design if it was placed carefully at a focal point of a whole Circus, designed carefully, leading up to it.

Miss Drew showed slides to illustrate her points and suggested that there might be a Commonwealth architectural competition for the conception for the Circus. "You could hardly do a more popular thing with the architects of the Commonwealth," said Miss Drew. "Then, I suggest, the individual architects of the developers might work in with this general scheme in the way in which we have had experience of working in with le Corbusier."

Ninth Day of the Inquiry

When the inquiry was continued on Friday, January 8, Miss Jane Drew was recalled and cross-examined by Sir Milner Holland, Q.C., appearing for Island (Piccadilly Development) Ltd. and The Legal and General Assurance Society Ltd.

Miss Drew explained that the proposal conflicted with the London County Council's advisory scheme, because it had a low frontage, and what she had described as a terminal form behind it which was quite different in conception from the frontage of the advisory scheme. The proposal was also in conflict with the advisory scheme in regard to pedestrian ways.

Answering a question of Mr. Stewart-Brown, Miss Drew agreed that the London Pavilion would have to be removed to build on the line of the extended frontage shown on her scheme, but you could build a part of the building, and that was often done.

The Inspector asked whether it would be fair to disregard the County Fire Office and the Swan & Edgar building because they were obsolescent. Miss Drew replied she did not regard these two buildings with any of the "holy, holy" atmosphere which some did. She would not tie the future development irrevocably to the heights of those two buildings, but she agreed with the evidence which had been given by many people that you could not have two contradicting verticals, the one in contradiction to the other. "I would not make these two buildings the necessary register of scale for a new conception of an enlarged Circus," said Miss Drew.

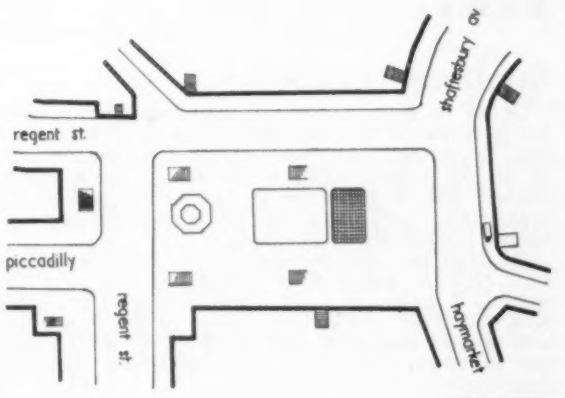
More than the problem of duality, Miss Drew said she was obsessed with the problem of getting a sense of enclosure into the Circus. She thought strong vertical access at the point of the proposal would be very difficult to form part of the total conception.

Noel Moffat Examined

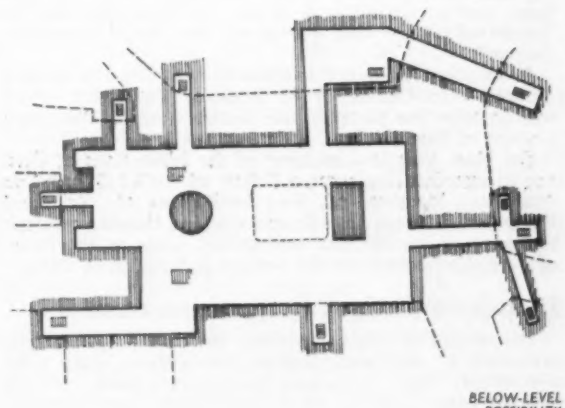
Examined by Mr. Kerrigan, who appeared with Mr. Elwyn Jones, Mr. Moffat said he represented 302 architects, and the heads and teaching staff of some 18 schools of architecture. In the opinion of the people he represented, Mr. Moffat said, the proposed building did not attain a sufficiently high quality of design to be worthy of the site. Commenting on the way the design was evolved, they submitted, with due respect to Mr. Hubert Bennett, Messrs. Cotton, Ballard & Blow, and Mr. Frank Booth, that this was not the way to design a worthy building. They agreed that collaboration with officers of any local

Continued overleaf

PERSPECTIVE VIEW



GROUND-LEVEL POSSIBILITY



BELOW-LEVEL POSSIBILITY

Sketches by Miss Jane Drew to show the inquiry how Piccadilly Circus could have a form of enclosure and overhead ways, which Miss Drew maintained need not be above 18ft something. Eros is shown in each sketch to help people find where they are. The below- and ground-level possibilities have lots of connections round the Circus. The upper-level has plenty of connections, but is not shown here in plan form. Miss Drew's suggestion follows generally the L.C.C. plan, and has the N.E. corner straightened much in the way Dr. Sharp did. Miss Drew thought the upper-level connection might go along Shaftesbury Avenue

Dr. C. A. Hart, rector and principal of the Nigerian College of Arts, Science and Technology, who has been appointed to succeed G. H. A. Hughes as director of the L.M.B.A.

NEWS

New Director for L.M.B.A.

Dr. C. A. Hart, C.M.G., T.D., D.SC.(ENG.), PH.D., rector and principal of the Nigerian College of Arts, Science and Technology, has been appointed to succeed Mr. G. H. A. Hughes, O.B.E., as director of the L.M.B.A. He will take up his duties as director designate at the beginning of April and assume full responsibility on September 1, when Mr. Hughes retires.

Dr. Hart has been principal of the Nigerian College since 1954. At that time the college had only some 150 students in residence: today it has over 1,000 and three branch colleges, one in each region of the Federation, with courses associated with the R.I.B.A., R.I.C.S. and the Institutions of Civil, Mechanical and Electrical Engineers.

In 1939 he was appointed tutor in engineering, surveying and town planning at the College of Estate Management, and on the outbreak of war was mobilized with the Territorial Army and posted to the Royal Engineers (Survey).

In 1949 he was invited to India by Mr. Nehru to become the first Vice-Chancellor of Roorkee University, which was to take the place of the historic former Thomason College of Engineering.

Dr. Hart, who is a member of the Institutions of Civil and Mechanical Engineers, a Fellow of the R.I.C.S. and an Associate Member of the Institution of Structural Engineers, has been actively concerned in building research for most of his life and represented India at the International Conference on the subject in London in 1951.

Shop-front Designs Competition Results

The results of the competition for shop-front designs, promoted by the Glass Benders' Association, have been announced. The competition was in two parts: (a) for a small shop front and (b) for a multiple store frontage, using bent glass as a feature of the design.

The winners were, in group (a): 1. Leonard Daniels, DIP.ARCH., A.R.I.B.A., F.R.S.A., Head of the School of Architecture, Stoke-on-Trent College of Art. 2. Christopher Read, A.R.I.B.A., Teddington. 3. David H. White, Weston-super-Mare. Commended: Malcolm G. Baird, L.I.B.D., Crawley. In group (b): 1. Richard Charles Burley, Hastings. 2. D. C. W. Vane, A.R.I.B.A., and G. D. Baker, A.R.I.B.A., Canterbury. 3. Leonard Daniels, DIP.ARCH., A.R.I.B.A., F.R.S.A., Head of the School of Architecture, Stoke-on-Trent College of Art. Commended: James Harbinson, East Dulwich, S.E.22, and D. C. W. Vane, A.R.I.B.A., and G. D. Baker, A.R.I.B.A., Canterbury. A picture of the winning design by Mr. Daniels in group (a) is shown on page 77.

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authority, considerations of plot ratio, etc., were all extremely important in the evolution of a design, but these were not nearly enough. There must be a fine architectural conception in the mind of the man who was responsible for the design of the building. That conception must dominate and control the whole evolutionary process. "Architecture," said Mr. Moffat, "is a creative art; it is not, what you, Sir, I think, called earlier in this inquiry, a 'have-a-go' process. This is not architecture."

They felt, said Mr. Moffat, that vulgarity was one of the reasons why people liked Piccadilly Circus, but there was a principle involved there. It was that the advertising was vulgar and not the architecture. They thought that the new architecture which was being created for Piccadilly Circus must not contain qualities of vulgarity, but that the vulgarity should be confined to the advertising. They suggested that the advertising should be completely separated from the building and properly designed in the centre piazza of the new Circus. "Noble architecture and vulgar advertising," said Mr. Moffat, "can exist side by side, the one acting as a foil for the other, and both profiting from the presence of the other."

They envisaged a Circus something like the L.C.C. proposal, but considerably bolder in conception. They thought the centre piazza should be very much larger than three-quarters of the size of Trafalgar Square quoted by Mr. Bennett, and that the principle of complete separation of pedestrian and vehicular traffic should be accepted. That would mean raising the new piazza above the level of the traffic, with the shops also at the upper level. They suggested that the developers had not liked the L.C.C. idea of upper walkways because they were too small, mean and insignificant.

If there were no shops at ground-floor level and all the shops were at first-floor level—in fact, an upper-level piazza with shops, advertising, café seats, trees, flowers, pigeons and everything else which made a pedestrian piazza alive—they suggested there would be no difficulty whatever in persuading people to go to that level in order to shop. The ground level would be reserved for traffic and all the pedestrians would be at the upper level. A fair approximation of what they had in mind would be Trafalgar Square at a height of 18ft with the traffic underneath it.

Mr. Moffat thought there would be no real difficulty in designing what Sir William Halford had called treillages on the piazza. They submitted that it would solve all difficulties, which the people giving evidence at the inquiry had had, in saying exactly how much advertising should be placed in the building, and whether the advertising should be vertical or horizontal. The architects Mr. Moffat was representing were in fact saying: "Separate advertising from the building, design noble buildings and good advertising, but do not try to do the same together." It was merely a question of design. There would be no trouble with obscuring windows, rights of light. There would be no trouble with creating really worthy buildings because the problem of advertising would not exist.

Cross-examined by Sir Milner Holland, Mr. Moffat said the idea of a high-level piazza with the traffic underneath was his personal idea and that he envisaged the extension of the Circus in an easterly direction.

Answering Sir Milner, Mr. Moffat said the advertisements would be disposed on the surface of the piazza in a pleasant way, some on the perimeter, some inside, some at right-angles to others. Mr. Moffat thought that what was worth preserving in Piccadilly Circus at the moment was that, if one could remove the traffic, one could stand in the middle, somewhere near Eros, and look around and see the advertisements on all sides except on the west, at a certain distance away and at a certain height, giving that feeling of enclosure that had been spoken about.

Peter Chamberlin's Evidence

Mr. Chamberlin, explaining to the Tribunal his views said: "Comprehensive redevelopment is important in most central urban situations, particularly at the important confluence of a number of busy streets such as Piccadilly Circus, Piccadilly, Regent Street, Shaftesbury Avenue, Coventry Street, all carrying large numbers of vehicles and pedestrians, which converge on the Circus. The resulting traffic problem even today, let alone in the future, might be compared with the railway traffic situation at Clapham Junction. Yet for many generations nobody has thought of continuing to mix pedestrians with trains in the way it was still regarded as inevitable that motors and pedestrians should be mingled."

His objection to the present development as proposed was that the approach to the problem of replanning Piccadilly Circus had been on too small a scale, no adequate plans existed to solve the traffic problem in the future, that the pedestrian was not going to come into his own, and that the building which was the subject of the present inquiry was misguided primarily because it represented what he thought was piecemeal development. This was, in itself, doubly bad, because it would inhibit, perhaps for a hundred years, the opportunity to create the sort of urban centre which might evolve, and which he, as a Londoner, thought Londoners deserved.

"Even if the intended building were an example of the art of architecture—which I do not regard it as being—" said Mr. Chamberlin, "I should be opposed to it because it is not designed as part of what should be a very significant open space which can be comprehended at a single glance and which, therefore, should be conceived and designed as a whole."

Referring to the way the design had emerged (see fifth day of the inquiry), Mr. Chamberlin thought that wherever you had planning control and interested parties, the process of to-ing and fro-ing was, to a certain extent, inevitable. But he did not accept that it was impossible in those circumstances to appoint either a single architect or a group of architects who were sympathetic in their way of working, and give them their heads. Referring to his own experience and that of his partners in connection with the Barbican area, he thought there was no question about it that in that situation, despite all the to-ing and fro-ing, they were able to arrive at a conclusion which they thought added up to the sort of total architectural concept that he had been stressing as important.

"Where the parallel breaks down, perhaps, is that that was in an area which was war damaged, whereas Piccadilly Circus was not. All I can say is that if it takes war to make these things possible, it does not say much for our society," said Mr. Chamberlin.

But he did not think that that was inevitable. If the problem was approached on the right scale, even if the development was spread over a period of 10 or 15 years, provided there was a general concept to start with and that the right thing was designed as it was intended ultimately to be, the right result would ensue, or rather could ensue. In his experience, adherence to the concept was achievable, but you must first of all decide what was desirable in the broadest terms. If there were obstacles, ways and means must be found of getting over them.

H. T. Cadbury-Brown's Evidence

Mr. Cadbury-Brown said he had the unanimous vote of the Council of the Architectural Association, representing a membership of approximately 3,300 architects, to appear at this inquiry and to object on the same grounds that were made in the letter (A. & B.N., 23/12/59, page 644).

Mr. Cadbury-Brown said that the body of architects for whom he spoke were in favour of coloured lights, signs, high buildings in London and new and exciting developments. The opportunity now existed during the next few years to make a positive contribution to London architecture and town planning. By accepting this proposal and the resulting piecemeal development, they were deliberately accepting the second-rate, and our attitude would be physically demonstrated in the centre of London for years to come. Our decision to be positive would be similarly shown. This inquiry was a turning point. If we showed courage, not only London, but many other towns would take heart. We should show that something new meant also something better.

In answer to a question by Sir Milner Holland, Mr. Cadbury-Brown explained that the "how" in his letter referred to policy and not to architectural planning. In other words the "how" meant: was the development of Piccadilly Circus to be left piecemeal or was it to be comprehensive? Was it to be comprehensive and ambitious, and, if so, was it beyond the financial capacity of the L.C.C. and should there be Government help? The "how" referred to policy and not the architectural search necessary into the whole structure of the problem.

Answering further questions, Mr. Cadbury-Brown agreed that the group referred to in his letter, which was to produce a recommendation within a few weeks, was to consist of local authorities and Ministries concerned, plus some architects.

T. S. Dulake's Valuation

Mr. T. S. Dulake, F.R.I.C.S., senior partner in the firm of Gerald Eve & Co., was examined by Mr. Elwyn Jones, Q.C., appearing for the Civic Trust.

Mr. Dulake, who is a specialist in town and country planning and kindred subjects, recently advised the City and County of Cambridge on the economic aspects of their scheme for seven acres in the centre of Cambridge.

Giving his estimate of the economics of the proposed site, Mr. Dulake said the net internal area of the building itself, the one usually used for valuation purposes, was 117,125 sq ft and that would produce an annual rent for the building of £254,000 a year. Capitalized at 16 years purchase, it gave a value for the building, when completed, of £4,064,000.

The value of the advertising signs on an estimated 18,000 sq ft (now reduced to about 16,300 sq ft) would produce an annual rent of about £360,000 a year, which, capitalized to show a return of 12½ per cent, produced a capital value of the signs of £2,880,000. That gave a total value of the completed building with its site of £6,944,000.

The total number of cu ft of the building was 3·697 million cu ft and at 8s 3d a cu ft it gave a cost construction of about £1,525,000. The figure of 8s 3d was based, Mr. Dulake said, on an estimate of the cost of the building including architects' and quantity surveyors' fees. On this residual method of valuation £5,419,000 was left to the site and to the profit of the developer.

Mr. Dulake put the value of the site at £100 per sq ft, which represented £4·35 million an acre, which to his mind was a pretty striking figure and produced a value of the site at £3 million. Deducting 3 million from £5·419 million left a profit to the developer of £2·419 million. That, said Mr. Dulake, represented 35 per cent profit on the value of completed building, 53·5 per cent on the developer's capital outlay. No allowance had been made in that schedule for deferment nor interest on capital estimated cost of the site. On this very special building, he thought advertising revenue could be maintained during the course of construction.

If you took away all advertising space above 100ft in height, it would leave about 8,600 sq ft of space below 100ft in height to the pavement level which would be worth £215,000 a year, or capital value of £1·72 million. That would give a total value for the complete building of £5·784 million. Deducting the cost of construction as before, the profit to the developer, on the developer's outlay would be 27¾ per cent.

Continued overleaf

MONICO SITE INQUIRY

Mr. Dulake then said he had considered two tentative suggestions as a means of developing the site, with a six- or seven-storey building. The first was based upon the site as it now stood. The second was on a site extending its frontage farther to the east (see sketch). Sir Milner Holland asked who was top architect who produced the sketches. Mr. Dulake said they were drawn for him and were not supposed to be top architect's plans. He would rather call them, perhaps a "surveyor's sketch", to see if what he said could in fact be achieved.

Mr. Elwyn Jones explained that the surveyor's sketch had been prepared by reason of the cross-examination of some of the witnesses, which was to the effect that no serious thought had been given to the practical problems like daylighting in Denham Street and other matters.

Mr. Dulake said the plan on the original site would give a total internal floor space of 137,850 sq ft in a total gross area for plot ratio of 189,700 sq ft. The other plan (the one illustrated) which followed closely the line suggested by Dr. Sharp, but did not go so far east as his, would have a total internal floor space of 141,900 sq ft and a gross area for plot ratio of 194,300 sq ft. Allowing 10,400 sq ft for advertising signs it would produce a profit to the developer of £2·345 million.

Mr. Dulake agreed that signs on the lower part of the building would be of more value than signs at the higher level. In his estimate he had reduced the cost of construction from 8s 3d to 7s 6d because he believed that a lower building without a central block would cost less.

Sir Milner Holland said he would ask the Press to report the following observations from him, that Mr. Dulake's figures proceeded on an assumption that the cost of construction was £1½ million, the cost of the site, or as he puts it, the value of the site was £3 million. Mr. Crickmay had given evidence on the fifth day and the beginning of the sixth day that the cost of acquiring the site was £4 million.

The Tenth Day of the Inquiry

On the tenth day of the inquiry, Monday, January 11, Mr. Elwyn Jones continued his examination by asking what Mr. Dulake would consider a suitable pattern for the comprehensive development of Piccadilly Circus.

Mr. Stewart-Brown objected that this evidence would be irrelevant to the inquiry. He said that a plan of a proposed comprehensive development concerned a great many owners and occupiers within that area and he would have thought that they would have been entitled to be heard if such a proposal was to be seriously considered.

Mr. Elwyn Jones replied: "One relevant issue as I understand it in this inquiry is whether or not the proposed development is appropriate, is suitable, is desirable, from the point of view of planning. Mr. Dulake takes the view that it is not, as I understand it, and is about to say why."

"It is quite true that his ideas involve other property and other people's property, but I have never known that to be an objection, for instance, in inquiries in regard to compulsory purchase to the objector saying A's land or B's land is far more suitable for the purpose you have in mind."

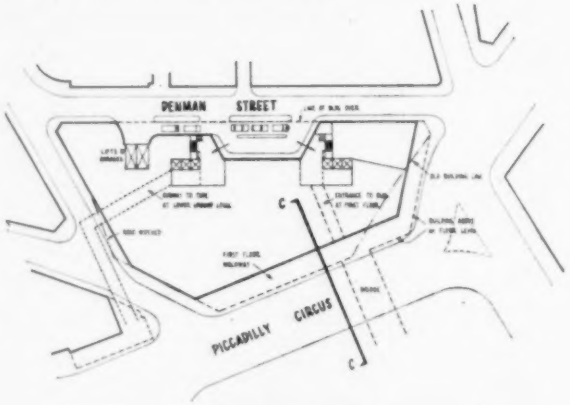
The Inspector allowed the evidence.

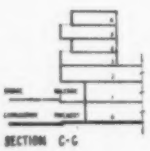
Mr. Dulake Makes a Proposal

Mr. Dulake said he thought the best course to take was for a master plan now to be made for an area of comprehensive redevelopment which he had shown on a plan (see this page). With such a plan many of the difficulties of developing this Monico site would disappear. The Monico site was ill-shaped at the moment and always would be unless it was straightened out at the back. This scheme would aid the redevelopment of the site which would be exposed when the London Pavilion was demolished; and it would aid redevelopment on the south of Piccadilly Circus which included the Criterion. One of the merits of the scheme these days would be that a very large car park could be built under most of the site.

Mr. Dulake thought that perhaps a working party of the two local authorities, architects and town planners, might be set up to advise upon this matter. He would suggest that they advised first of all on what area could properly be made one of comprehensive redevelopment. They could advise on a master plan for the whole area and they could advise or give outline suggestions for individual buildings.

He did not think it would be necessary compulsorily to acquire all the land. Any existing landowners or developers with interests in land who would conform to the master plan should be allowed to do so, but to encourage this common development, parts of the area, if not the whole of it, should be designated for compulsory purchase. He thought that the redevelopment of this larger area would be economically sound. It would pay for itself, and it would ensure that the increases in land values, which would certainly come about, would not go wholly to the existing freeholders.





Above, Mr. Dulake's "surveyor's sketch" for an alternative development of the Monico site. Left, the section C-C. Below, the area suggested by Mr. Dulake for the comprehensive development scheme

In answer to questions, Mr. Dulake said that he did not see why this whole area should not be redeveloped forthwith. He suggested that the remainder of the lease of the London Pavilion (which had five years to run) should be acquired to allow for demolition. This would make possible the kind of improvement in the Monico site indicated in his sketch scheme B (see illustrations). When things were worked out in more detail an even greater frontage to the northern side of Piccadilly Circus could be achieved.

In answer to questions, he said that the idea in scheme B had been developed on the assumption that it was necessary to maintain building on the confines of what had been described as "that somewhat difficult site".

The frontage had been extended on the northern side, rather on the lines suggested by Dr. Sharp, but not going so far east. As a compensatory factor it was suggested that there should be a widening of the 14ft wide Glasshouse Street on the left of the building.

Asked if that would be a small sacrifice to make for extending the frontage, Mr. Dulake replied that there would be a considerable benefit to anybody building on the site. He thought he would like to see the northern side of Piccadilly corresponding in length to the southern side, which was probably going a bit farther than Dr. Sharp. Clearly with a comprehensive scheme that would fall into the right place.

Mr. Dulake agreed that the possibility of a subway being driven from the inside of the building to the Underground station underneath the sewer seemed a practical proposition.

A Rectangular Circus

Mr. Spencer C. Rodgers, appearing in a personal capacity, asked if Mr. Dulake would prefer to see Piccadilly Circus more rectangular than its present plan. Mr. Dulake said he thought the new Circus should be more or less a rectangle. The present frontage of the Criterion Theatre block should remain; the eastern side of Haymarket should be extended in a northerly direction, and that would be the eastern boundary of the Circus. The Regent Street line should be carried across in an easterly direction, and that would be the northerly side of Piccadilly Circus.

Osbert Lancaster

Mr. Osbert Lancaster said: "It seems ridiculous, now that we have got effective legislation which prevents the countryside being wrecked by hoardings, that we should allow the urban landscape to be destroyed by a scheme such as this. I am not remotely against advertising; advertising in Piccadilly Circus at its present level is perfectly acceptable. Moreover, the size of the individual posters is conditioned largely by the architecture and façades on which they are displayed. Once you get an unrestricted space such as this tower provided for advertising, one is going to have the worst excesses of Times Square in New York plonked down in the middle of London and I, for one, would very much regret that.

"Secondly, with regard to the scheme, it seems ridiculous that a scheme for the whole area has been devised which appears to be at least rational and on which, presumably, a great deal of time and energy and a certain amount of the ratepayers' money has been spent, and the first building to go up in the area knocks the scheme sideways."

In cross-examination by Sir Milner Holland, Mr. Lancaster said that, in his view, as a matter of taste, he agreed with other witnesses who had said they would prefer horizontal treatment in Piccadilly Circus, with horizontal signs. Piccadilly Circus, compared with the rest of Westminster, was comparatively high ground, so anything that went up there would be visible over half London.

Mr. Dulake Cross-examined

Mr. T. S. Dulake was recalled for cross-examination by Mr. Stewart-Brown.

Mr. Stewart-Brown suggested that it would be impossible to produce a satisfactory architectural solution for either the scheme A or scheme B introduced by Mr. Dulake.

Mr. Dulake said he would certainly think that a defeatist view. He would say with confidence that he was sure that for a building of this type of layout—he would not say this precise layout because with further study more improvements might be made—an admirable elevation could certainly be designed.

Mr. Stewart-Brown suggested that Mr. Dulake's sketch would inevitably result in a design far worse than that of the applicants. Mr. Dulake disagreed. He said: "First of all, I think the principle has to be decided whether you want this block or whether you want a horizontal building. I personally favour a horizontal building, I must say, upon this site."

He went on to say that a skilled architect could produce a horizontal elevation, covered 30 to 40 per cent with electric signs, and still make a beautiful design.

Referring to Mr. Dulake's proposed comprehensive development area, Mr. Stewart-Brown noted that it contained seven legitimate theatres. He asked if Mr. Dulake would favour, for instance, the acquisition of the site of the Queen's Theatre by the L.C.C.

Mr. Dulake said: "No. I think I have said study would be required, and any existing building which conformed to a master plan would not be touched, naturally. If it does not conform and cannot conform, then I would recommend it." He added that he agreed with the L.C.C. policy that no theatre should be destroyed or displaced without another being substituted for it.

He agreed with Mr. Stewart-Brown that if it were not economically possible to secure the rebuilding of these theatres then these would have to be left or the number of theatres would have to be reduced.

Lord Conesford

Lord Conesford, examined by Mr. Elwyn Jones, denied that he had been prompted to intervene (in Parliament) by Mr. Cadbury-Brown (a suggestion made earlier by Sir Milner Holland). What he had said and done in Parliament was, he said, spontaneous and not at any suggestion or request of any outside person or body.

Lord Conesford mentioned in passing that his first knowledge of the proposed development was on November 1 last year when he read Mr. Furneaux Jordan's article in *The Observer*. He regarded the design as deplorable, and decided to oppose the development as strongly as he could. At that time he was unaware of any views expressed by the Royal Fine Art Commission and he was ignorant of how far the L.C.C. might have gone in giving its consent to the proposed development. In any event, it was not too late for the Government to intervene and, said Lord Conesford, "I regarded it and regard it as their duty to do so."

Professor Grace

Professor John G. Grace, Professor of Architecture, Tulane University, New Orleans, U.S.A., said he had been trained at the English universities and was an Associate of the R.I.B.A.

He was rather amazed at the way in which his professional colleagues had submitted to what he would describe as a process of digging for information during the inquiry and that this could not go unchallenged.

Professor Grace said: "I should have thought Counsel would have sought by every possible means to expand alternative suggestions from some of the very highly paid and competent architects here."

Professor Grace concluded his evidence by suggesting to Mr. Jack Cotton and his development group that they "offer a challenge to the architects of Britain in the shape of a competition for a building truly worthy of their capacities".

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Next week: Counsels' final submissions.

BRITISH ARCHITECTURAL STUDENTS' ASSOCIATION

B.A.S.A. CONFERENCE ON ARCHITECTURAL EDUCATION

reported by JOHN SMITH

THE British Architectural Students' Association is just over two years old and if the setting provided by Churchill Hall, a new hall of residence of Bristol University may have appeared a lost opportunity to some of the delegates attending the Conference on Architectural Education earlier this month, it was soon apparent that they themselves were determined to lose no opportunity in getting down to tackling the urgent problems that now face the architectural student community. The 60 student delegates, representing some 19 schools, proved that B.A.S.A. is getting over its teething troubles by the quietly serious way in which they conducted their discussions, the clarity with which they presented a notable report on education, and the vigour they displayed in arguing over and agreeing the texts of their final resolutions.

Objects of the Conference

In its advance publicity B.A.S.A. had defined the object of the conference as being fourfold:

(1) To study education in its broadest terms as applied to other faculties in universities and other academic institutions.

(2) To relate this study of the basic truths of education to architectural education.

(3) To find out the students' reactions to the Oxford conference.

(4) To form a B.A.S.A. policy on architectural education.

They considered that "there is a process fundamental to all creative activity, and to study this can only lead us to a clearer understanding of how we should educate ourselves for this purpose. To solve any problem there must be a logical process of thought based on: (1) Knowledge and experience; (2) Analysis; (3) Synthesis; (4) Execution of the solution". The last mentioned was subsequently redefined as "Production".

In an introductory note B.A.S.A. president, Jeremy MacKay-Lewis, had stated: "In these days when the aesthetic as well as the technical fields confronting the architect are so wide and complex, a process of reasoned thinking is even more important than ever if the architect is not to be misled by preconceived ideas and superficialities which lack imaginative treatment based on clear and logical thought.

"The architect today has got to use his brain as never before in history and, without being taught the basic process of analysis and synthesis, how can he hope to grapple with the problems which confront him? His influence is great and his responsibility for the environment which he creates enormous. He must be trained for this heavy responsibility in the best possible way. A course of education should be balanced in relation to the tasks which he is to meet in the outside world, and the development of his personality should be such that he gives confidence to all those with whom he has to deal."

Guest Speakers

The logical process defined was not disputed and the three guest speakers, Guy Oddie on "Analysis", Colin St. John Wilson on "Synthesis" and Frank Jones on "Knowledge, Experience and Production", found themselves addressing a sympathetic audience. The discussion following each paper was largely confined to pragmatical disputes between these three speakers in which Kenneth Campbell, the lone star of the Establishment present, occasionally joined. The three papers were excellent and worthy of a far larger audience. If they are now but fleetingly commented upon, it is not for want of respect for their authors, but rather because the conference was essentially a student affair and, as such, the students' own contributions demand the greater attention here.

However, mention must be made of Frank Jones' succinct plea for the need to establish the general *principles* applicable to each branch of technology; and also the way in which he deplored the lack of scholarship amongst architects, exploding the craft myth, believing that too many technicians exist in the profession and not nearly enough *educated* architects. He also questioned whether the type of experience that students would get in most offices was necessarily the right type for the potential architect. He felt that the ideal arrangement would be for the student to act as a personal assistant to an architect, thereby gaining more varied and useful experience than the conventional "office experience" allowed.

Colin St. John Wilson, in considering the need for clarifying the theoretical basis for architecture, admitted the confusion caused by the large number of seminal buildings and the fact that eminent architects' writings often bore little relation to their work. He compared architectural education with a jungle fighter's training and decorated his brilliant paper with apt quotations and a selection of *sponge* words (like "intuition", "image", "beauty" and "vernacular") none of which are likely to be used by any of his audience again! Defining "synthesis" as the act of invention he appeared to deny "inspiration" the *tertium quid* of the design process according to Jordan; but he was not challenged.

In discussion Guy Oddie was deliberately provocative, but only his assertion that "People who have come up from the ranks are seldom any good" brought forth the expected and eloquent and quite unprintable expression of disgust from a more senior member of his audience.

B.A.S.A. Education Report

Perhaps the most important item of the conference, and certainly one of the most interesting, was the B.A.S.A. Report on Architectural Education presented by Chris Musson, a student from Cardiff. The report had been compiled from answers to a questionnaire drawn up by the B.A.S.A. group in Cardiff and circulated last November to most of the architectural schools in this country. Completed returns had been obtained from 20 out of 24 recognized schools and from half the intermediate and listed schools. There had not been sufficient time to analyse the returns from the latter two categories and the report, therefore, was concerned solely with conditions in the fully recognized schools. The picture of these schools that emerged proved beyond any doubt the validity of most of the attacks on the existing educational system made by its more outspoken critics in recent years.

In introducing the report, it was freely admitted that the 13-page questionnaire referred to contained questions that were "loaded", and others that, judging by the confused answers, had really required further explanation or less ambiguous wording.[1] This is, of course, inevitable and should not be allowed to detract from the value of the report. The introduction concluded significantly with the desired "image":

[1] A typical example of an unsatisfactory question is: "Do you consider that the studio accommodation at your school is, in general—(a) Good, (b) Adequate, (c) Bad, or (d) Very Bad?" Inevitably the answer was usually "Bad" or "Very Bad", the basis for such judgment being conjectural, students acknowledgedly knowing little or nothing about facilities in schools other than their own. It would have been more useful to have asked: "What are the average facilities and space standards per student in your studios?" and "If you consider these inadequate, what do you consider the minimum should be?"

(1) "The object of a system of architectural education should be the production of a student with a wide and critical outlook on affairs in general and on architecture in particular, as well as a sound and general knowledge of the building and allied industries upon which to base a system of architectural design founded upon a logical method of analysis and synthesis.

(2) "This would be achieved by the following means: (a) by providing for a higher level and wider range of basic education prior to entry to a school of architecture; (b) by creating and maintaining a close contact with students and experts in universities, art schools, building colleges and allied professions such as engineering and interior designing; (c) by basing this education upon guidance rather than upon instruction so as to develop the talents of a more self-reliant and independent student; (d) by the constant encouragement of explanation, discussion and criticism, both informally and in student societies and especially in the marking and criticism of students' design projects."

The contrasting "reality" contained in the report was a grim catalogue of the failures and shortcomings of the existing pattern of architectural education. Certain statistical information had been collected to check and amplify that contained in my report on the schools published two years ago and was also correlated to the statistics in the recent report of the committee on the Oxford Architectural Education Conference.[2] Much of the other information was amusingly varied, perhaps intentionally, and ranged from the vital to the irrelevant. Existing conditions, teaching staff and the students themselves were severely criticized. Heads of 18 of the schools were classified as "Routine Administrators" (6), "Progressive Administrators" (8) and "Reactionary Old Fogeys" (4). Only two of these heads apparently are "definitely under 50" and six of them are of "retiring age". Significantly there was an appeal for more principals like Douglas Jones at Birmingham, and professors like Sir Leslie Martin at Cambridge, and Robert Matthew at Edinburgh. The conclusions to the report are worth quoting in full:

The Conclusions to the Report

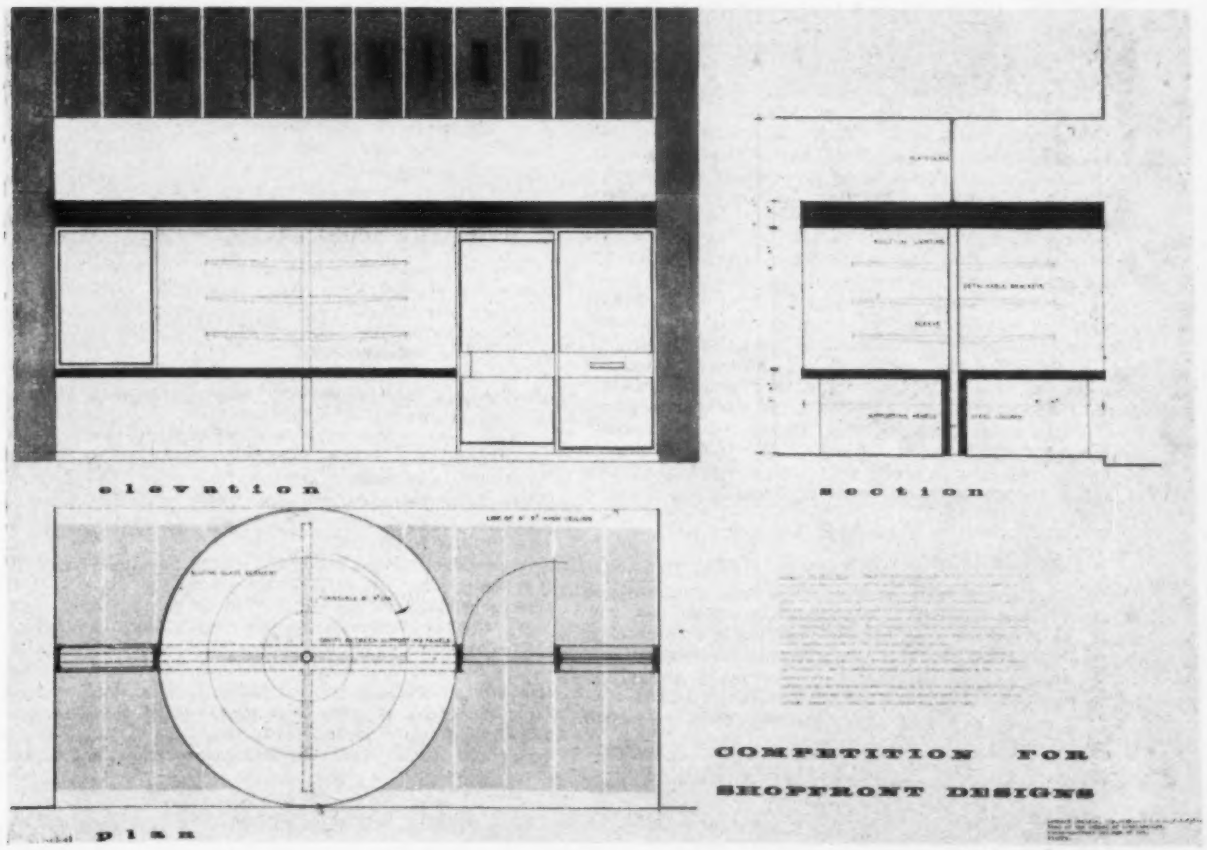
"This, then, is the picture we have built up of our present system of architectural education, and our most important schools of architecture. It is not a very inspiring picture. In fact, it is one of chaos, of lost opportunities and missing facilities, of apathy and of frustration."

"It shows that:—

- "Working conditions in the schools are frequently very bad indeed.
- "The staffs of our schools need drastic overhaul and review; they are often performing functions which they are not qualified or fit to perform; they frequently lack the confidence of the students. They often do not contain members who should be an integral part of any building team.
- "The heads of our schools, who should surely be the leaders in educational matters at least, are too often bogged down by routine administration.
- "The students are in general apathetic and of a lower educational standard than is required by any comparable profession; they are largely content to follow blindly a course which they do not appreciate in its entirety, year by year, scheme by scheme, in a series of unrelated exercises leading only to larger and more complex exercises.
- "The staff-student relationship is not what it should

[2] *See A. & B.N., November* 18, 1959.

First prize in section (a) of the shop front competition sponsored by the Glass Benders' Association (see p. 72). *Architect, Leonard Daniels, Head of the School of Architecture, Stoke-on-Trent College of Art*



B.A.S.A. CONFERENCE

be in a profession which perhaps calls for more co-operation than any other, the students are often treated like schoolchildren, and just as often behave like them; there is a lack of co-operation, contact and communication between staff and students on educational and architectural matters; discission, argument and criticism is inadequate.

- "There are virtually no facilities for architectural research either by students or staff.
- "The schools often operate in a vacuum, unrelated to other spheres of interest, to architectural and engineering practice and to the mechanical process of building and with virtually no contact with each other.
- "The students are rarely trained to use a logical method of analysis and usually work intuitively or by trial and error.
- "Lectures are often poor and given by members of the staff who are not genuine experts in their subjects.
- "Sociology, costs, construction, structures and the history of the modern movement—five vital fields of knowledge for the architectural student—are badly taught, or not taught at all: adequate structural advice is rarely available—every school, surely, should have a full-time structural engineer on its staff.
- "There is little contact with art, industrial design and other three-dimensional studies.
- "The students are often dissatisfied with a many-graded marking system which places too much attention on marks, and too little on explanation and criticism.
- "Architectural education is based on *teaching* rather than *guidance*.
- "This is our system and these are our schools. The contract with our 'image' is pretty dismal.
- "What of the future? How shall we get the schools and the education that architecture and society deserve?
- "Let us be brutally honest for a moment. No system and no school will ever provide all the facilities and fulfil all the functions that we desire. No school will be perfect; there will always be defects.
- "Let us be honest again. Such suggestions as the total disestablishment of the present system and the concentration of all education in six ideal schools are impractical and irrelevant. They bear no relationship to fact; they are as invalid as an architectural solution which ignores the site.
- "We must exploit and mould what already exists, but we must be bold and not just tinker with it, and above all we must never, never lose sight of our ultimate ideal: A NEW AND BETTER ARCHITECTURAL EDUCATION."

That some of these conclusions are open to question will not be disputed and although, as Kenneth Campbell pointed out, the somewhat haphazard and unscientific method adopted in the compilation of the report leaves much to be desired, the frightful "reality" of the situation remains vividly depicted. Reading the B.A.S.A. report is a must for all concerned with architectural education; if a few bloodvessels are burst in certain quarters, few will be sorry.

Draft Resolutions

Subsequent discussion at the conference was confined to the draft resolutions a Steering Committee had prepared. These were considerably amended in detail and at the final meeting the following resolutions were passed almost unanimously (with only an occasional abstention) under the very able chairmanship of Hilary Chambers:

▸ Architectural Education

"Architectural education should be based on a wide general education and should stimulate the student to evolve a philosophy related to a changing society and teach him to realize this philosophy in the technics of the society."

It was suggested that this could be studied under (a) analysis, (b) synthesis, (c) production.

▸ Analysis

"Architectural schools should train students to adopt a logical method of analysis to architectural problems, this being essential to the creation of a valid architecture."

▸ Synthesis

"Architectural schools should provide a training which will enable the student to gain a personal philosophy which, together with basic knowledge, experience and skills, will synthesize the results of his analytical studies into a valid architecture."

▸ Production

"Architectural schools should provide an education which, when supplemented by further experience, will enable the young architect to realize his ideas in practice."

▸ Raising the Standard of Entry

"The standard of entry into the profession should be raised to the General Certificate in five subjects, two being at 'A' level, thus endorsing the Oxford Conference recommendation."

An important proviso to this resolution was that some form of "loop-hole" should be provided for students in exceptional circumstances, it being considered that scholastic capability was not necessarily directly related to architectural potentiality, and thus a student of ability who was not academically minded should be catered for.

▸ "Two-Tiered" Profession

"We reject the Oxford Conference proposal for the establishment of an approved form of training for technicians on the grounds that it simply recognizes an existing situation but does not examine whether this situation is desirable in the present or likely to continue in the future."

This resolution virtually reversed the meaning of the Steering Committee's original draft. The subject was discussed at length and it will be interesting to see what impact this resolution will have in official quarters.

▸ Research Facilities

"There is a deplorable lack of facilities for architectural research and therefore (this conference) wholeheartedly endorses the Oxford conference's condemnation of this situation, strongly recommending that this problem is given urgent consideration."

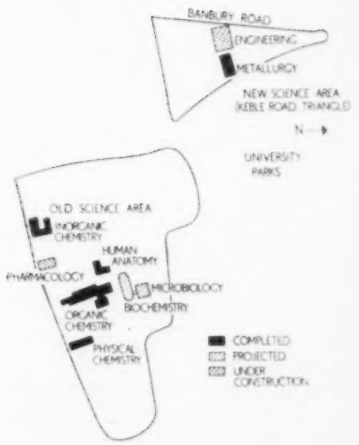
A last-minute resolution proposed from the floor and unanimously agreed stated: "There is a deplorable lack of alignment between architectural education, the architect and architecture in contemporary society," and demanded "that a research group should be established to analyse the essence of the necessary co-ordination between the three and to suggest how it can be re-established with particular reference to its implications on architectural education".

These resolutions will form the basis of the official B.A.S.A. policy on education, which will be developed further at their next conference to be held later this year, under the title "Development in Architectural Education".

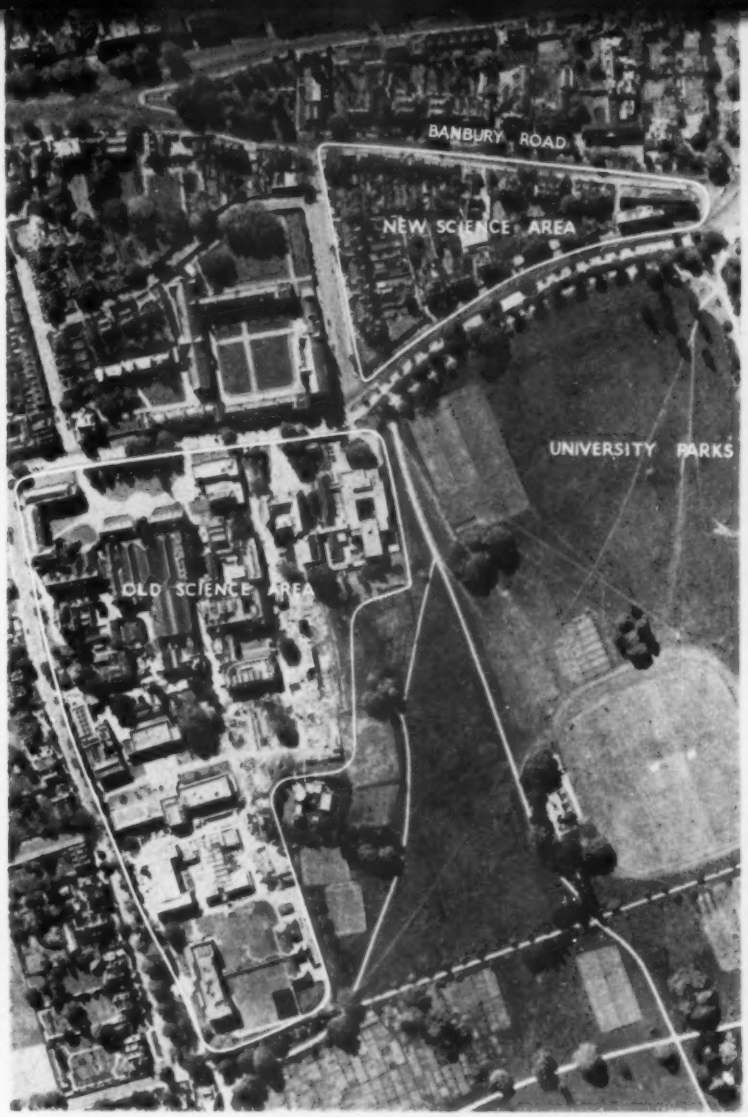
The Bristol Conference has proved that B.A.S.A. now means business and it can be hoped that it will go from strength to strength in the future. Certainly students everywhere and as many architects as possible who remain actively interested in the many problems of architectural education should give the association their warm and active support.

THE ARCHITECT and Building News,
20 January 1960

UNIVERSITY BUILDINGS—I



Site plan above, showing position of the buildings, completed, projected or under construction now and during the past five years. The photograph to the right shows the new science area in relation to the old area. The whole of the new area, the Keble Road triangle, has been designed by Ramsey, Murray, White and Ward



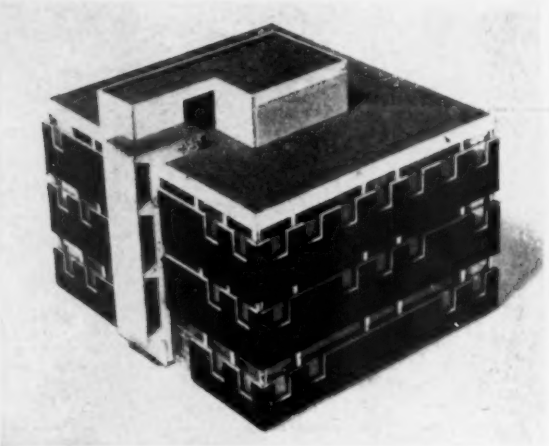
NEW SCIENCE BUILDINGS OXFORD

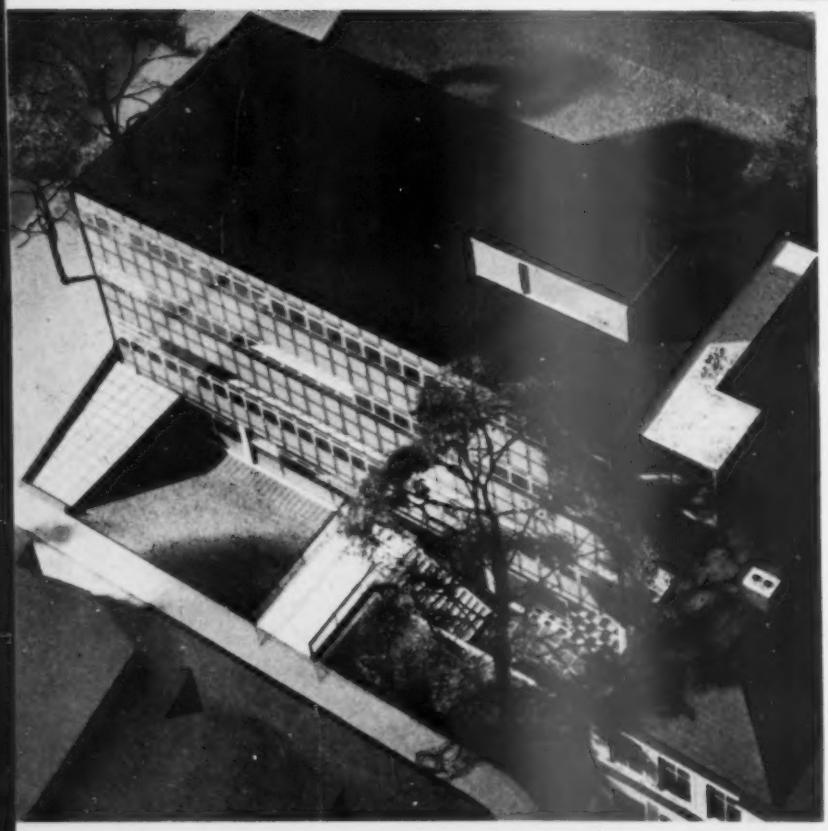
- **Metallurgy (completed and occupied)**
- **Organic Chemistry (completed and occupied)**
- **Engineering (construction started)**
- **Pharmacology (construction started)**
- **Micro-biology (construction started)**

Following the Government's recent concern about the state of scientific education, the universities have put in hand large programmes of expansion. The first scientific buildings to be completed as a result of this are now being occupied. In this issue we document two such buildings at Oxford : the organic chemistry building (an extension to the Dyson Perrins Laboratory) and the metallurgy building, on the new science area (the Keble Road triangle). Both these buildings are by Ramsey, Murray, White and Ward. We also show three projects, the pharmacology building, by Gollins, Melvin and Ward, and the engineering building and the micro-biology building (on the Keble Road triangle). The last two are by Ramsey, Murray, White and Ward. Further to these, two buildings designed by Lanchester and Lodge, inorganic chemistry and human anatomy, were occupied a few years ago. Two more buildings are by Ramsey, Murray, White and Ward, bio-chemistry (project) and physical chemistry (finished and occupied). The contract sum for organic chemistry was £139,780 (20,450 sq ft ; cost per sq ft £6 16s 8d) and for metallurgy £106,881 (12,910 sq ft ; cost per sq ft £8 4s)

◀ *The engineering building, on the Keble Road triangle (see plan opposite south-west of metallurgy, which is shaded). Architects, Ramsey, Murray, White and Ward. It is the second building to be built on the triangle (metallurgy, illustrated on the facing page, is the first). The concourse at first-floor level will be built around engineering, as part of the contract, and will link the two new buildings. The building is 125ft high and planned round a central service and communication core with laboratories arranged around it and free of any free-standing internal columns*

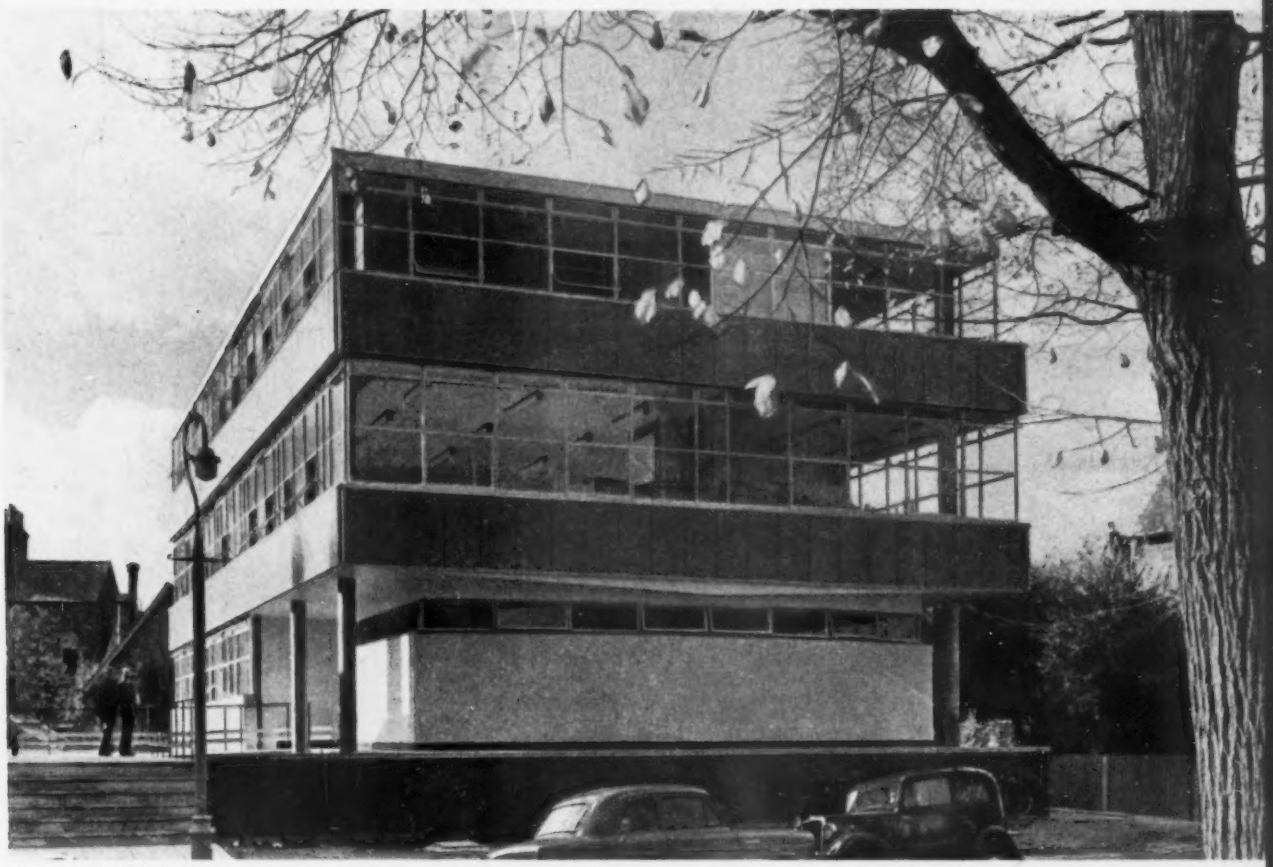
Micro-biology (old science area), architects, Ramsey, Murray, White and Ward. The building is planned around a central core (like engineering shown above). The structure is a reinforced concrete frame faced with Portland stone and a blackish brick. The super-structure is in white concrete with white Mineralite panels. The research to be done in these laboratories demands conditions without dust or germs. The shape of the windows was decided on by the internal requirements. The factors taken into consideration were the lighting and the type and position of equipment used in the building ▶





◀ *The existing department of pharmacology, built at the turn of the century, lies in the university science area between the University Museum and the Dyson Perrins Laboratory; the site for the extension, architects, Gollins, Melvin and Ward, which will approximately double the department's size, lies between the latter and the new inorganic chemistry building with its south boundary formed by South Parks Road. On the ground floor there is one large laboratory for 30 students. On the lower ground floor are workshops where the apparatus used in the department is devised and made and on the first and second floors there are research laboratories and study rooms for staff and students*

WORK IN PROGRESS



Photos: COLIN WESTWOOD

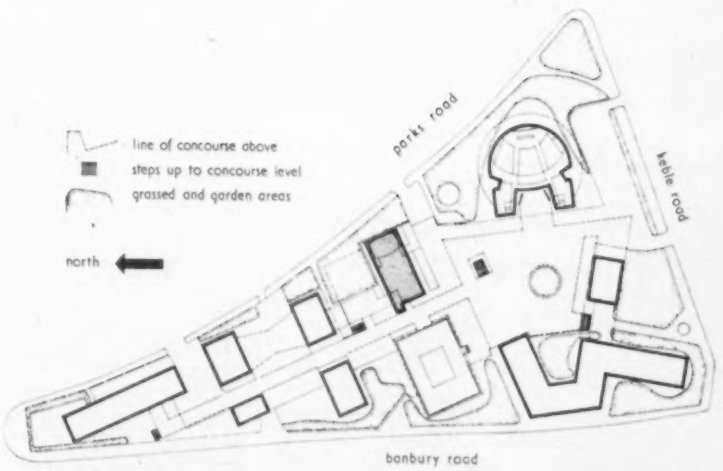
Above, view from Parks Road. Below, the site plan of the new science area

RESEARCH AND TEACHING LABORATORIES, OXFORD

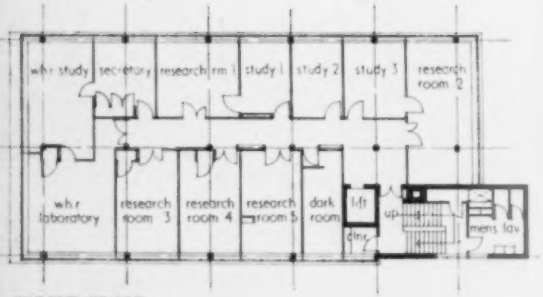
Architects: RAMSEY, MURRAY, WHITE and WARD
Partners in Charge: BASIL WARD and GEORGE BUZUK
Structural Engineers: SCOTT and WILSON, KIRKPATRICK
Service Consultants: HARDING, McDERMOTT and Partners
Quantity Surveyors: A. R. MAIS and Partners

THE building for the Department of Metallurgy, University of Oxford, is the first to be completed under the development project for the extension of the Oxford University Science Area on the Keble Road triangle.

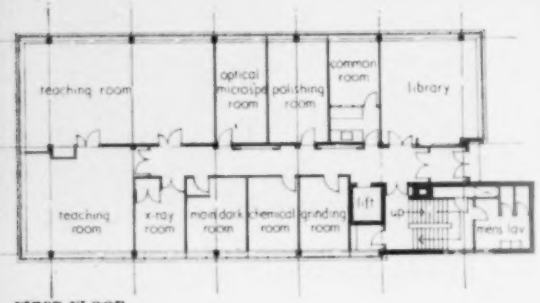
In designing the building allowances had to be made so as to conform with the master plan prepared by the same architects. The main points of consideration were to keep the first floor on a predetermined level for future connection to the elevated pedestrian concourse, to make provision for access at that level (careful planning of the internal circulation) and to design for future extension towards the north. Furthermore, the routes of services to supply the whole of the



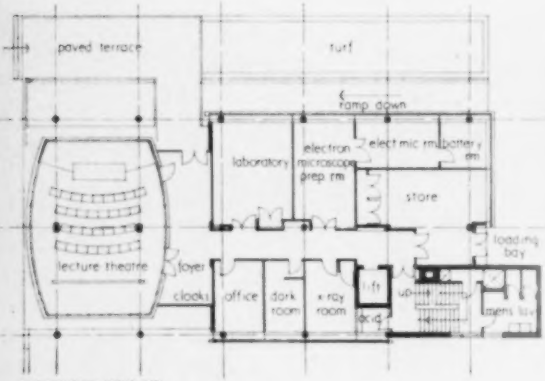
Top, view from the service road that runs down the centre of the site. Below, teaching laboratory and lecture theatre



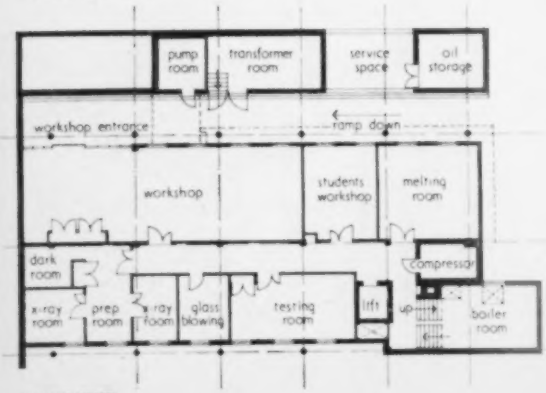
SECOND FLOOR



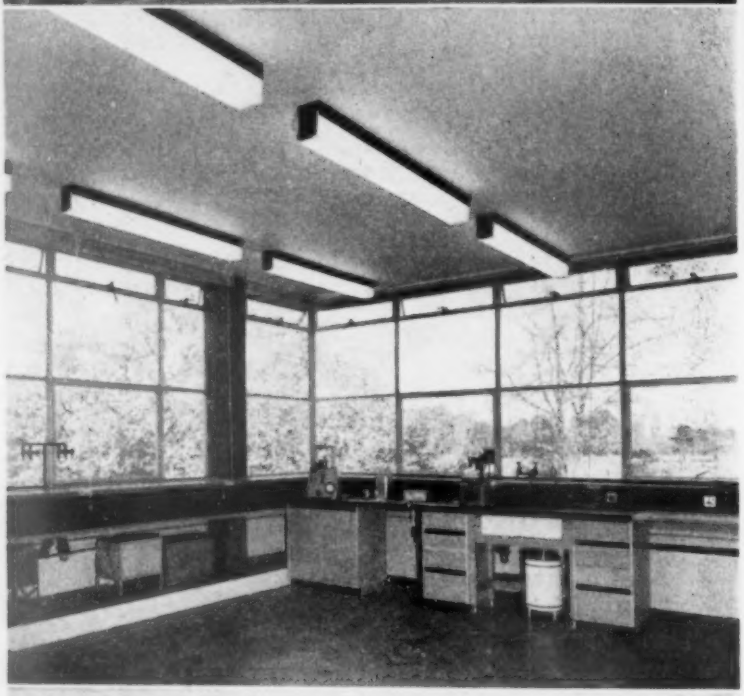
FIRST FLOOR

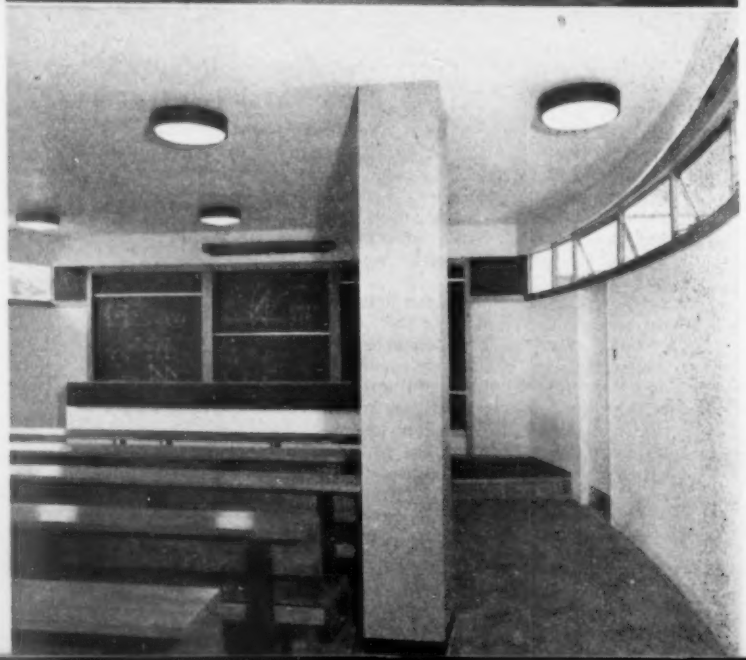


GROUND FLOOR



BASEMENT





METALLURGY LABORATORIES

triangle had to be considered as a small piece of a large complex.

Planning

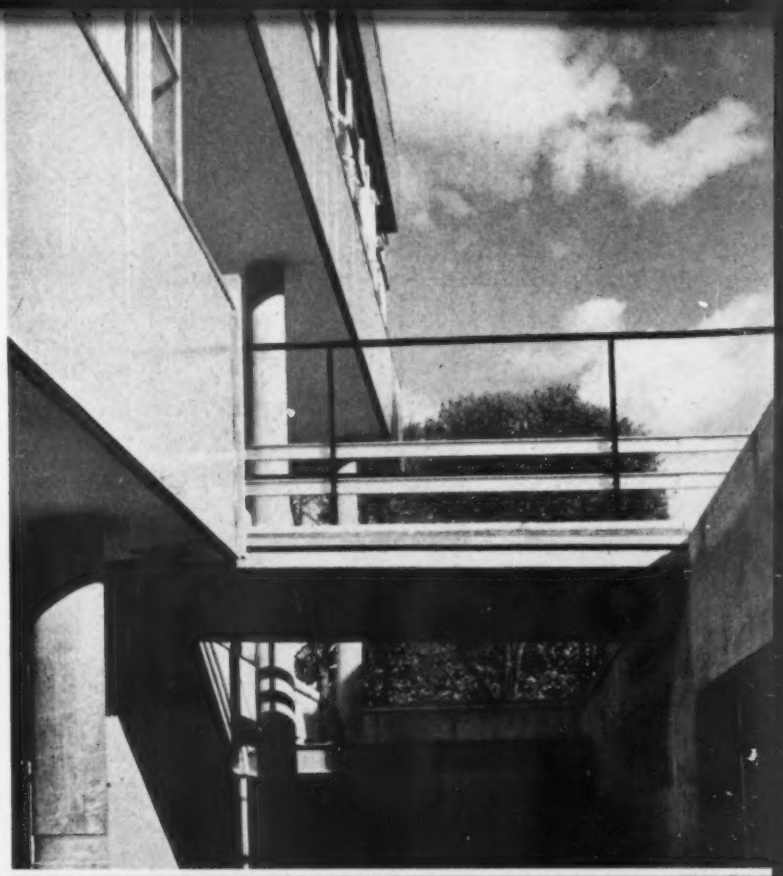
The well-equipped workshop with its heavy machines is placed in the basement and has an independent access by means of a ramp. Teaching accommodation, special rooms and stores are at intermediate levels. Research rooms and offices occupy the top floor. A lecture theatre, seating about 30 at ground-floor level, is placed in a secluded position at the end of the block. At the opposite end, a solid rectangular box of concrete encloses stairs, lavatories, boiler-room and the main vertical ducts. The lecture theatre and the stair block have been treated as separate elements intentionally disturbing the simple lines of the main block.

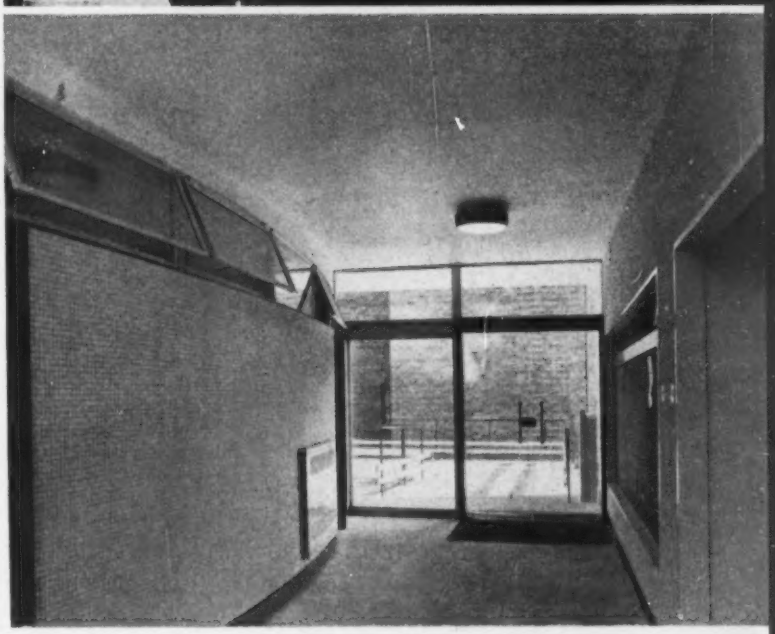
Construction

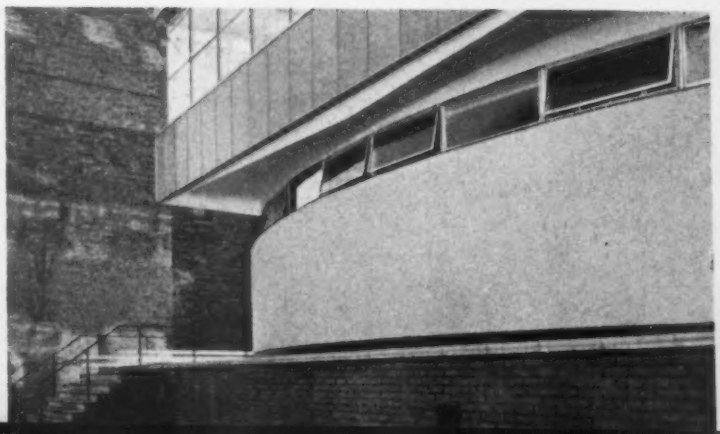
Foundations consist of a grid of r.c. beams contained within two r.c. slabs. Each column (there are three rows of columns at 16ft centres and 20 ft apart) carries at floor level an upstand beam and solid r.c. slab tapering upwards away from the central row of columns. There are no cross beams. Aerated screed was used to level the top of the floor slabs and to cover the upstand of the central beam. The increased thickness of screed at the middle of the slab was utilized to house runs of services.

External walls of the main block are built in 6in insulating blocks supporting windows and lightweight external cladding. The basement and staircase wall are in concrete 6in thick and act as stiffeners to the whole of the structure. Internal partitions are made of 3in blocks of the same composition as those in the external walls.

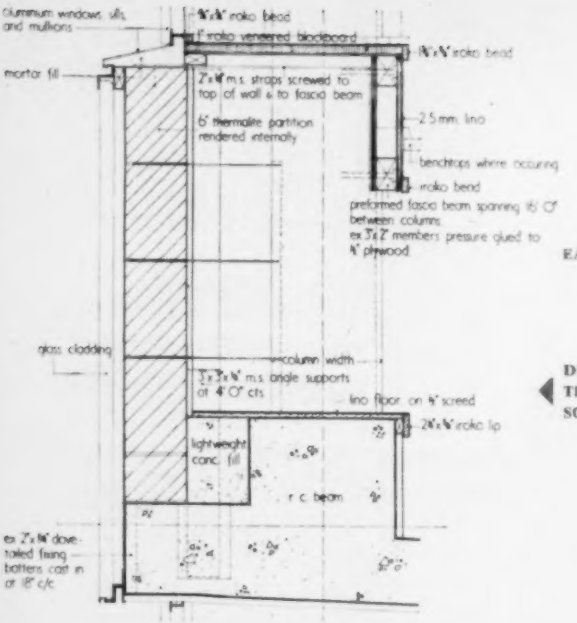
External block walls are clad with slightly textured grey laminated g'ass-fibre panels stiffened at the back with a corrugated sheet of the same material. Owing to their lightness and ease of assembly, two men were able to fix all the panels in about ten days.



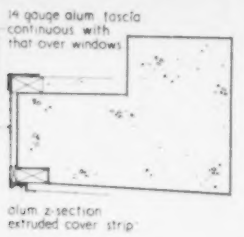


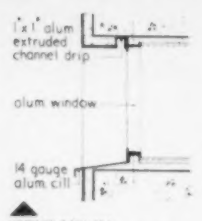


Top, the main entrance is over a bridge which spans the ramp to the workshop in the basement. Below, the entrance foyer with the lecture theatre on the left. Right, the curved wall of the lecture theatre


aluminium windows, sills and mullions
mortar fill
glass cladding
2"x¾" m.s. straps screwed to top of wall & to fascia beam
6" thermalite partition rendered externally
2.5 mm. lino
benchtops where occurring
preformed fascia beam spanning 16' 0" between columns
ex 3"x2" members pressure glued to ¾" plywood
lino floor on ¾" screed
lightweight conc. fill
r.c. beam
ex 2"x¾" dovetailed fixing battens cast in at 18" c/c

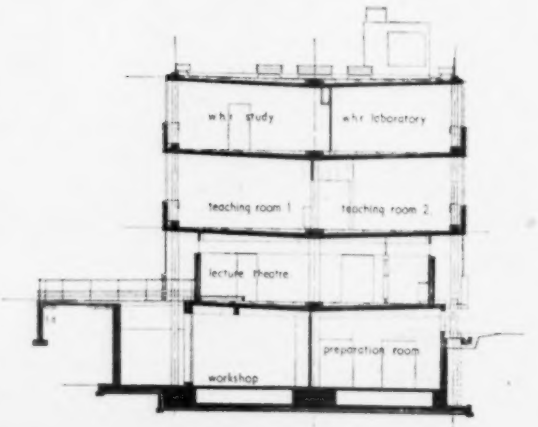
EAVES DETAIL





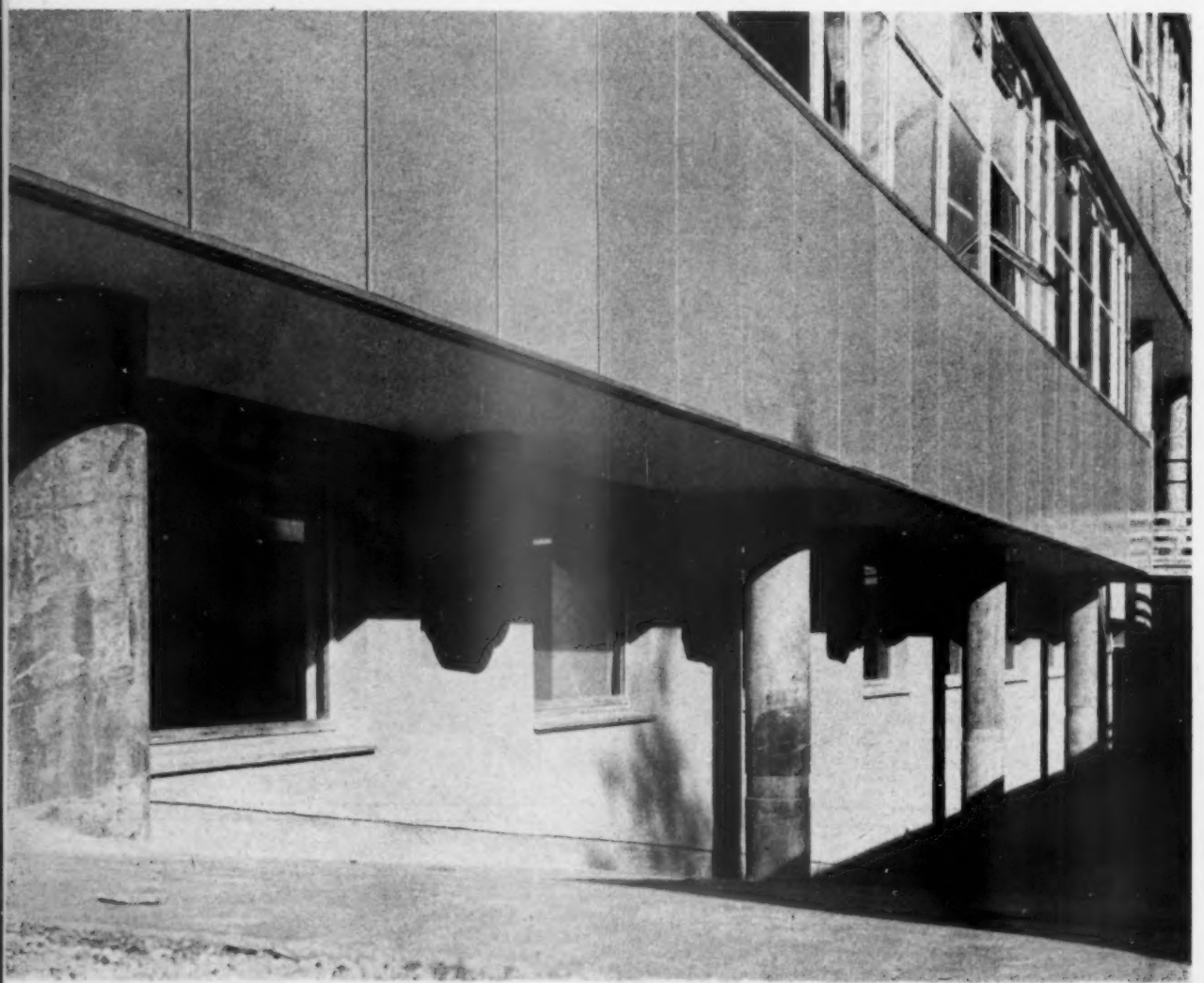
WINDOW IN STAIRCASE TOWER

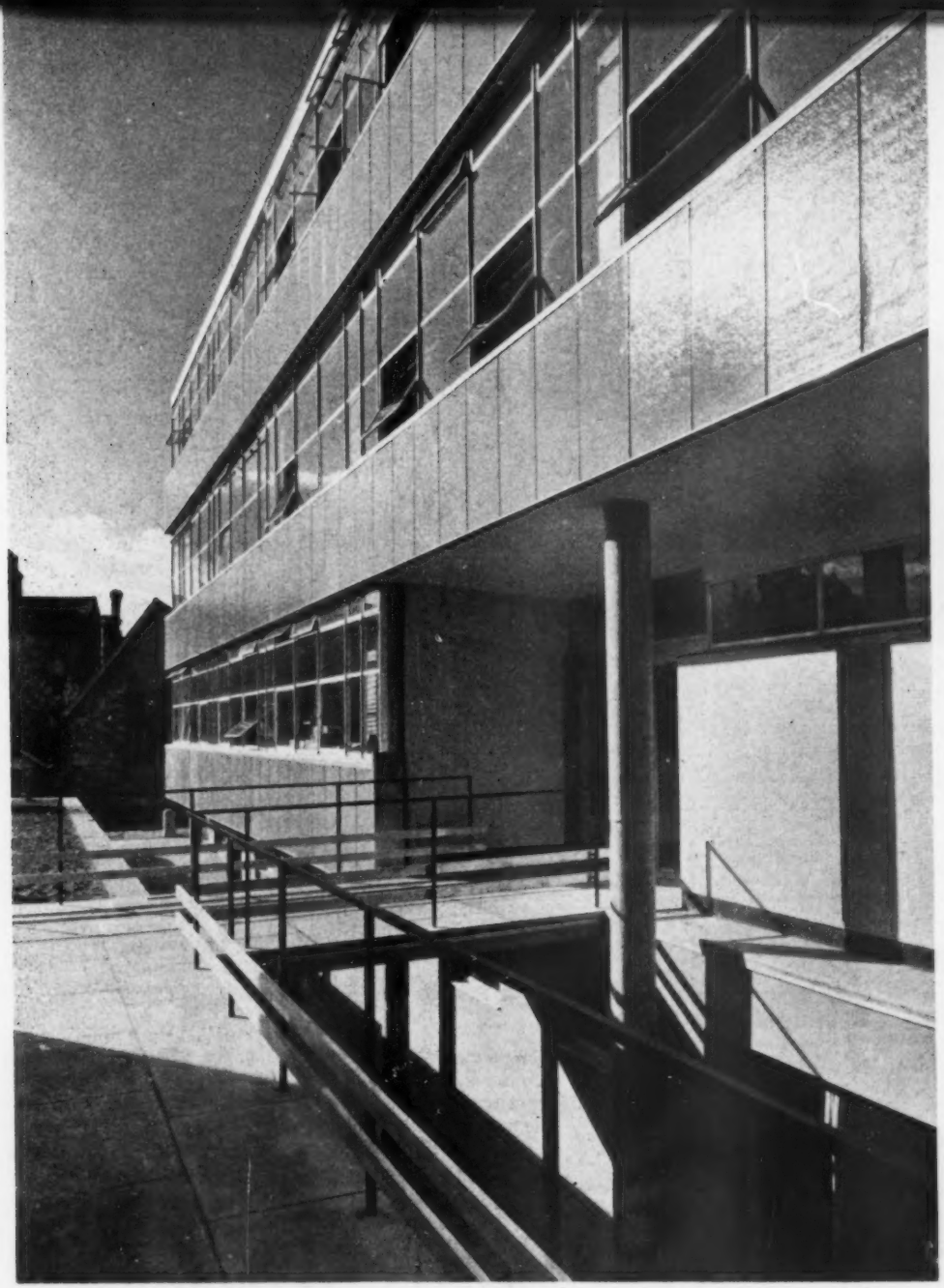
DETAIL. SECTION THROUGH WALL SCALE: 1 IN=15 IN



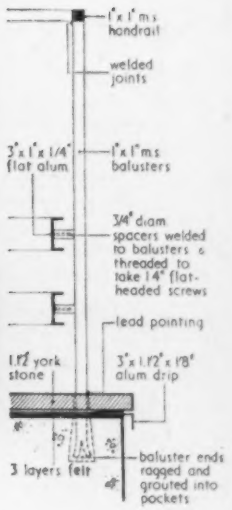
SECTION THROUGH LECTURE THEATRE

Below, the ramp down to the workshop; the columns were cast in cardboard tubes





The main entrance with the lecture theatre on the right. The cross-section through the building shown on page 84 is taken just in front of the freestanding column shown in the photograph


1" x 1" m.s. handrail
welded joints
3" x 1" x 1/4" flat alum
1" x 1" m.s. balusters
3/4" diam spacers welded to balusters & threaded to take 1/4" flat-headed screws
lead pointing
1 1/2 york stone
3" x 1 1/2" x 1/8" alum drip
3 layers felt
baluster ends ragged and grouted into pockets

HANDRAIL

METALLURGY LABORATORIES

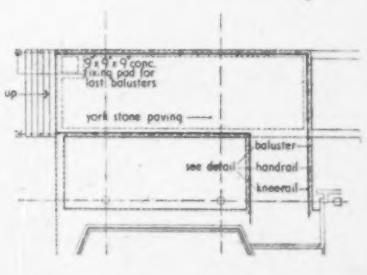
Ceramic mosaics and scraped rendering in white and olive green are used on the concrete walls. Free-standing columns were cast in cardboard tubes and some concrete walls have been left untreated.

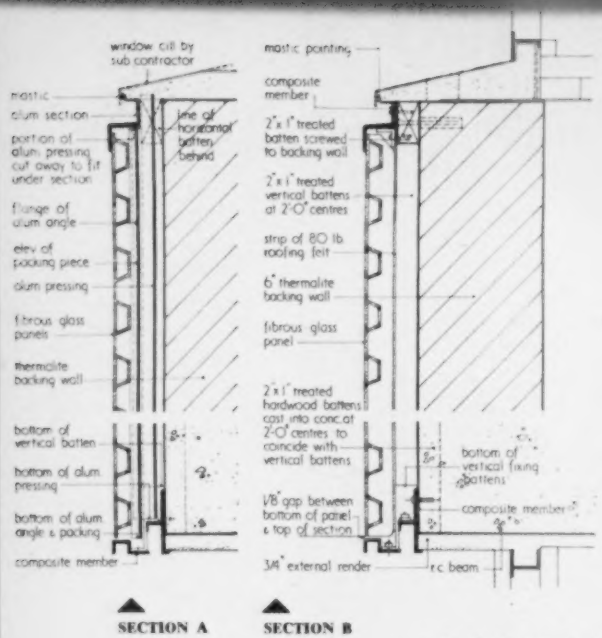
Internally, floors are in "Muhuhu" block. Walls and ceilings are plastered. Plain concrete walls in the basement area are painted. Special plaster was used in the X-ray rooms to reduce radiation.

Heating

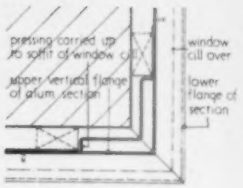
The building is heated by a system of coils embedded in the ceilings. Temporary oil-fired boilers located at the bottom of the stair block supply the heat. In the future a central boiler house, planned to serve the whole of the triangle and scheduled to be built in conjunction with the new engineering department, will be used. The existing boiler installation will then be replaced by calorifiers.

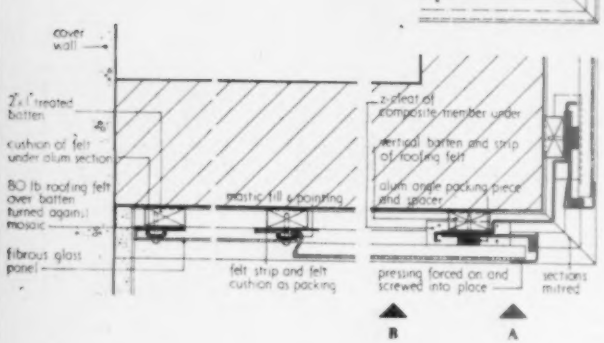
KEY PLAN : ENTRANCE

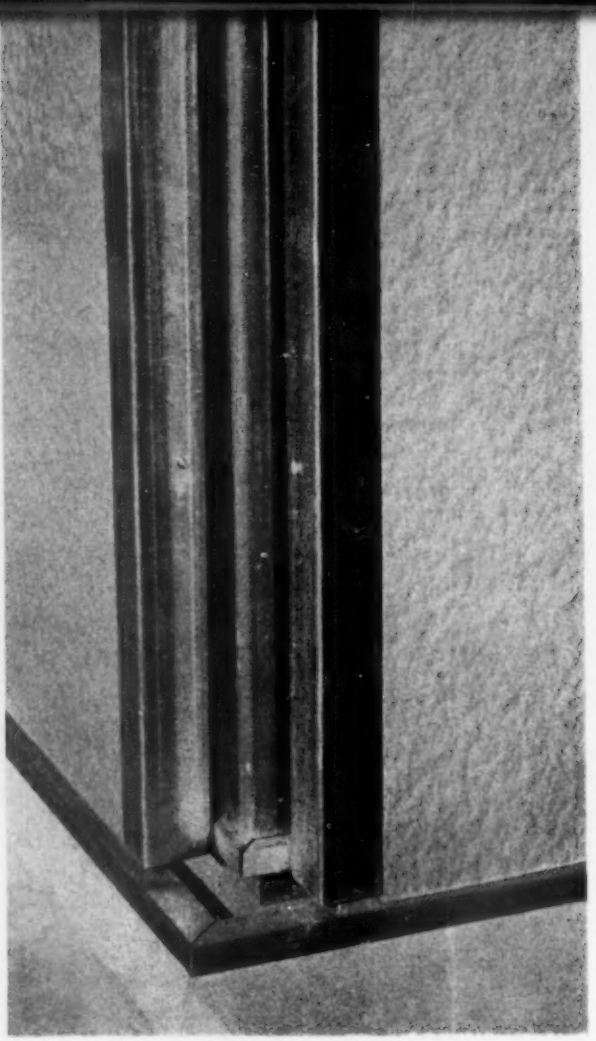



window cill by sub contractor
mastic
alum section
line of horizontal battens behind
portion of alum pressing cut away to fit under section
flange of alum angle
elev of packing piece
alum pressing
fibrous glass panels
thermalite backing wall
bottom of vertical batten
bottom of alum pressing
bottom of alum angle & packing
composite member
mastic pointing
composite member
2"x 1" treated batten screwed to backing wall
2"x 1" treated vertical battens at 2'-0" centres
strip of 80 lb roofing felt
6" thermalite backing wall
fibrous glass panel
2"x 1" treated hardwood battens cast into conc at 2'-0" centres to coincide with vertical battens
1/8" gap between bottom of panel & top of section
3/4" external render
bottom of vertical fixing battens
composite member
r.c. beam
SECTION A
SECTION B

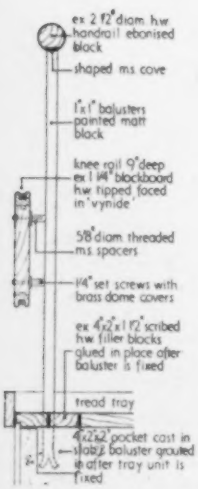
Detail sections above, and plans below of the F.breglass cladding (patents pending)

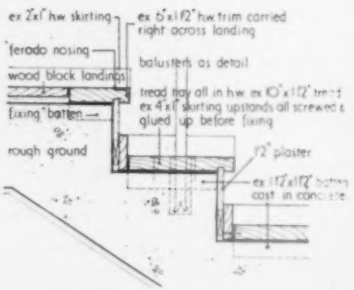

pressing carried up to soffit of window cill
upper vertical flange of alum section
window cill over
lower flange of section

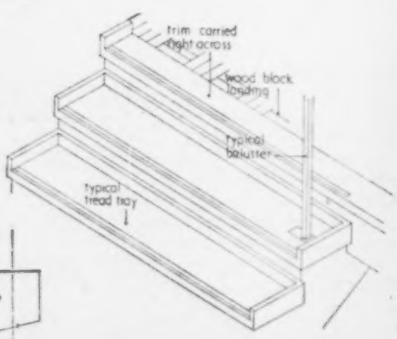

cover wall
2"x 1" treated batten
cushion of felt under alum section
80 lb roofing felt over batten turned against mosaic
fibrous glass panel
mastic fill & pointing
felt strip and felt cushion as packing
z-sect of composite member under
vertical batten and strip of roofing felt
alum angle packing piece and spacer
pressing forced on and screwed into place
sections mitred
B
A

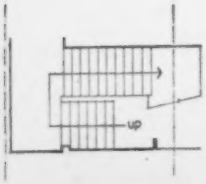


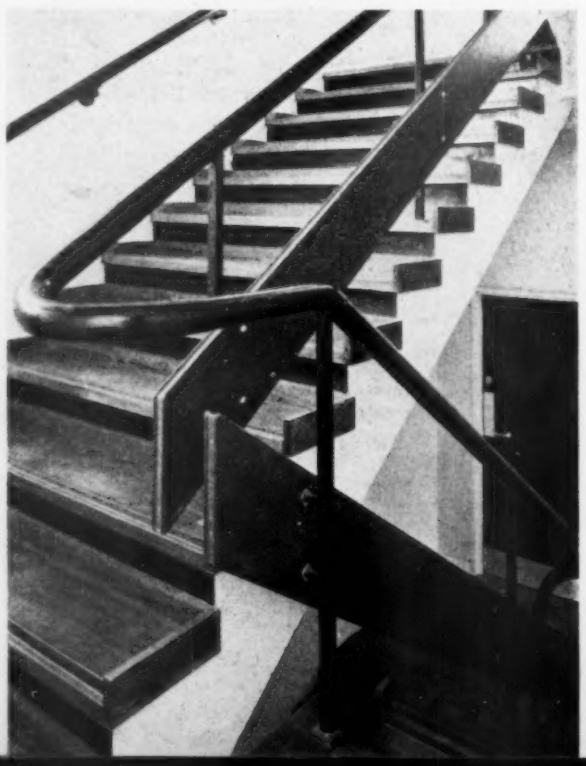
Above, external corner of cladding, see plans on left; the top plan is taken below the Fibreglass. Staircase below Opposite page, top, view of the wide cill, plan and section also shown. Right, the junction between the staircase tower (mosaic faced) and the glazed facades


ex 2 1/2" diam. hw handrail ebonised black
shaped ms cove
1"x1" balusters painted matt black
knee rail 9" deep ex 1 1/4" blockboard hw tipped faced in "vynide"
5/8" diam threaded ms spacers
1/4" set screws with brass dome covers
ex 4"x2"x1 1/2" scribed hw filler blocks glued in place after baluster is fixed
tread tray
4"x2"x2" pocket cast in slab & baluster grouted in after tray unit is fixed


ex 2"x1" hw skirting
ex 5"x1 1/2" hw trim carried right across landing
ferodo nosing
wood block landings
balusters as detail
tread tray all in hw ex 10"x1 1/2" treads ex 4"x1" skirting upstands all screwed & glued up before fixing
fixing batten
rough ground
1/2" plaster
ex 1 1/2"x1 1/2" batten cast in concrete





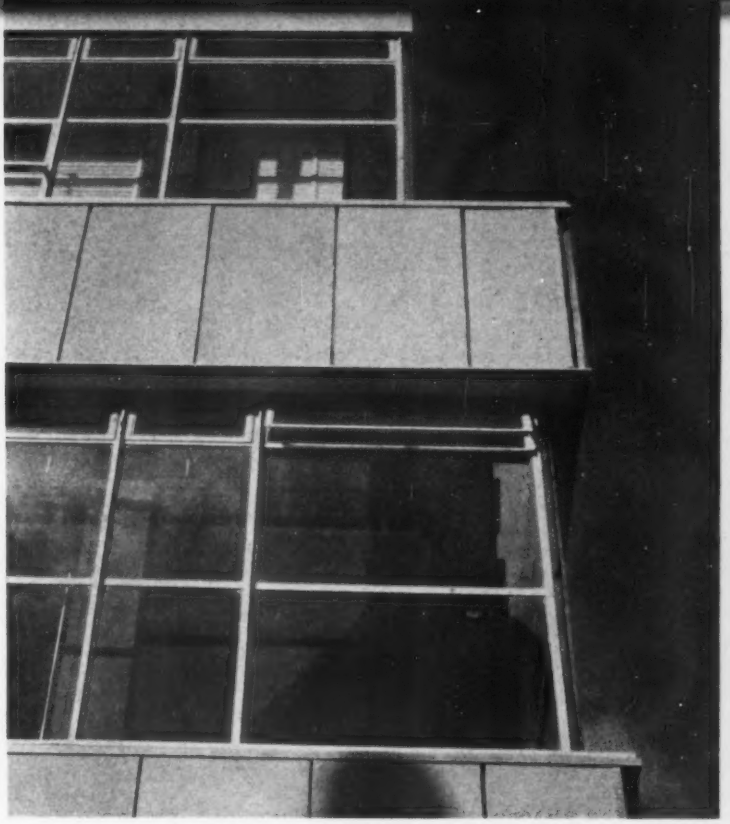


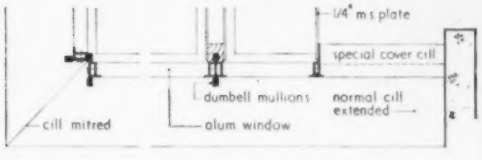
THE ARCHITECT and Building News,
20 January 1960

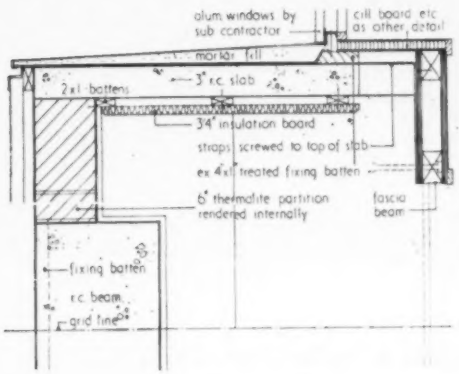
METALLURGY LABORATORIES

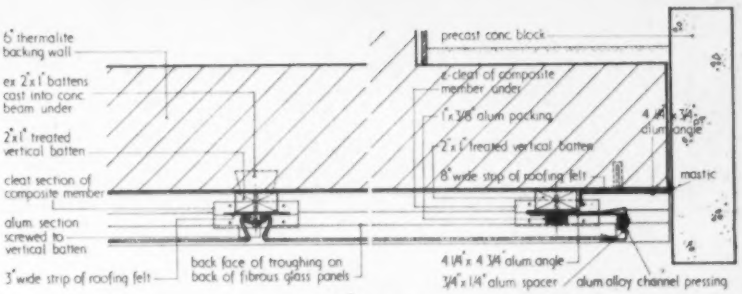
Services

Water, gas, compressed air and various electrical services are provided and their main circuits follow the perimeter walls of the main block. The runs of services are contained in a special housing under the wide window cills and branch off to outlets along internal partitions. As a rule, all service outlets, with the exception of water, are placed on deep window fascias in order to free the bench tops and to allow for the rearrangement of storage units underneath.







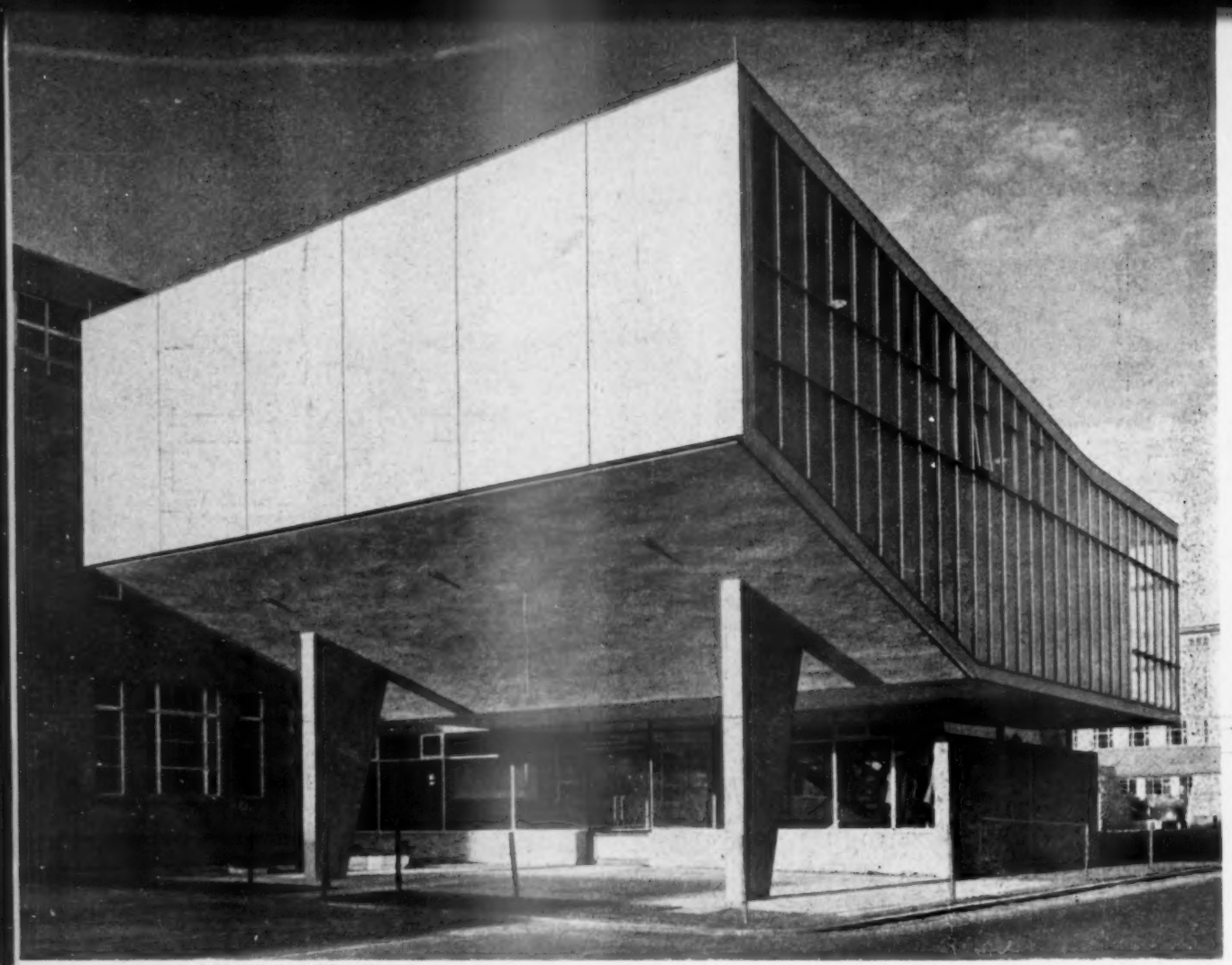

6" thermalite backing wall
ex 2"x1" battens cast into conc beam under
2"x1" treated vertical batten
cleat section of composite member
alum. section screwed to vertical batten
3" wide strip of roofing felt
back face of troughing on back of fibrous glass panels
precast conc. block
c. cleat of composite member under
1"x 3/8" alum packing
2"x 1" treated vertical batten
8" wide strip of roofing felt
mastic
4 1/4"x 3/4" alum angle
4 1/4"x 4 3/4" alum angle
3/4"x 1/4" alum spacer
alum alloy channel pressing

END DETAIL OF GLAZED FACADES

General Contractors:
W. J. WHITTALL & SONS LTD.

Sub-contractors and suppliers:

Acoustic Booth: Burgess Products Co. Ltd. *Aluminium Windows:* Wainwright & Waring Ltd. *Balustrading:* Grundy Arnatt Ltd. *Asphalt Tanking:* Ruberoid Co. Ltd. *Curtain Tracks:* Hall Stage Equipment Ltd. *Blinds:* J. Avery & Co. Ltd. *Built-up Felt Roofing:* Oxford Asphalt Co. *Duromit Heavy Duty Paving:* Haskel Robertson Ltd. *Electrical Installation:* Troughton & Young Ltd. *Erect Scaffolding:* Scaffolding (G.B.) Ltd. *Fibrous Glass Cladding:* R. J. Symons Ltd. *Flush Doors:* Leaderflush Ltd. *Glass and Glazing:* Faulkner Greene & Co. Ltd. *Heating Installations:* Fred. G. Alden Ltd. *Internal Telephone Systems:* Standard Telephones & Cables. *Laboratory Fittings:* Armstrongs (Hull) Ltd. *Landscape Works:* Freelance. *Lead Core Doors:* Flexo Plywood Industries Ltd. *Lightning Conductors:* J. W. Gray & Son Ltd. *Lightweight Screeds:* Celcon Ltd. *Mono-rail Runway:* Felco Hoists Ltd. *Mosaic Finishes:* Carter & Co. (London) Ltd. *Passenger Lift:* Marryat & Scott Ltd. *Painting and Decorating:* J. Patrick & Co. *Plastering:* T. Hawkins. *Plumbing:* David F. Wiseman Sons Ltd. *Sanitary Fittings:* Adamsez Ltd. *Scraped Render Finishes:* Campbell Horne & Co. Ltd. *Special Doors:* Baker's of Wycombe Ltd. *Supply and Fix Reinforcement:* The Helical Bar & Engineering Co. Ltd. *Terrazzo Partitions:* Minoli Co. *Testing Concrete Cubes:* Oxford University Engineering Laboratory. *Theatre Seating:* Scientific Installations Ltd. *Wall and Floor Tiling:* Webbs (Kings Heath) Ltd. *Window Cleaning:* Faultless Services. *Woodblock Floors:* Stevens & Adams Ltd.

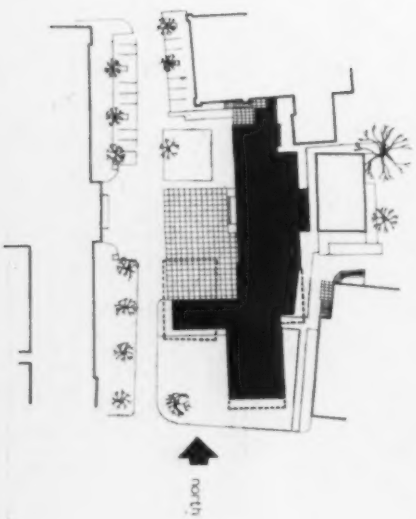


Photos: COLIN WESTWOOD

Lecture theatre

RESEARCH AND TEACHING LABORATORIES, OXFORD

Architects: RAMSEY, MURRAY, WHITE and WARD
Partners in Charge: BASIL WARD and GEORGE BUZUK
Structural Engineers: OVE ARUP and Partners
Service Consultants: J. STINTON JONES and Partners
Quantity Surveyors: A. R. MAIS and Partners



UNTIL lately the Department of Organic Chemistry of Oxford University occupied the original Dyson Perrins Laboratory and its later extension. Neither building was suitable for the department's modern function; the two buildings communicated only by means of a passage at ground level.

The requirements of the new programme were: (a) to provide additional floor space for research work, teaching, offices and studies, and (b) to connect the old and new buildings at all levels. The requirements were met by filling a three-level gap between the old buildings, adding a new floor to one of them and by providing a new wing with a lecture theatre at the north end. The new building is equipped with a variety of services terminating in groups of outlets. The walls were built in 6in rigid insulation faced with laminated glass fibre panels.

The advantages of a framed structure over a load-bearing wall structure were well illustrated when it came to adding a new storey over the existing extension. The building was designed to take another storey, but provision for it was made within the limited scope of the load-bearing wall system. Sure enough the disposition of rooms as required was in striking discord with the disposition of rooms suggested by structural considerations. Consequently a light steel frame had to be devised. The lines of columns are made to coincide with the main walls underneath. The possible distribution of columns was very restricting.

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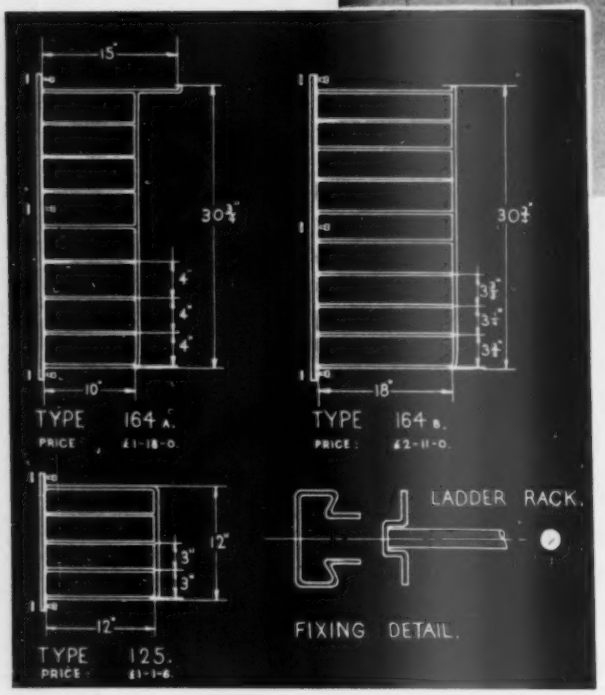

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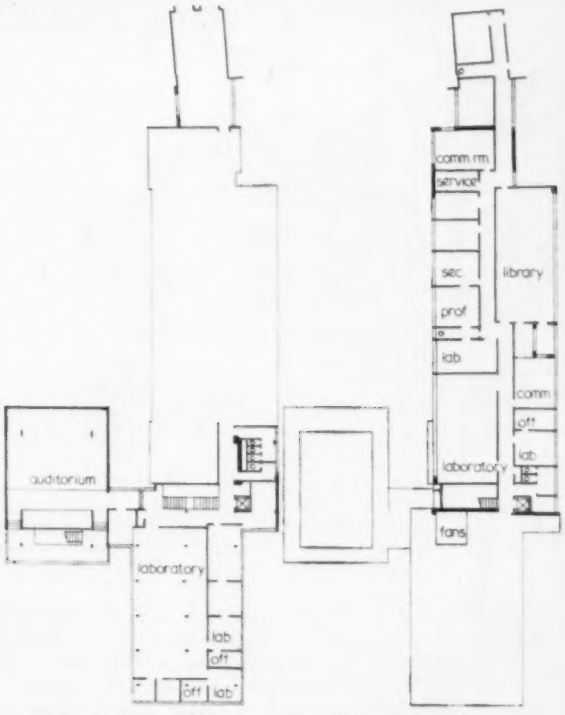
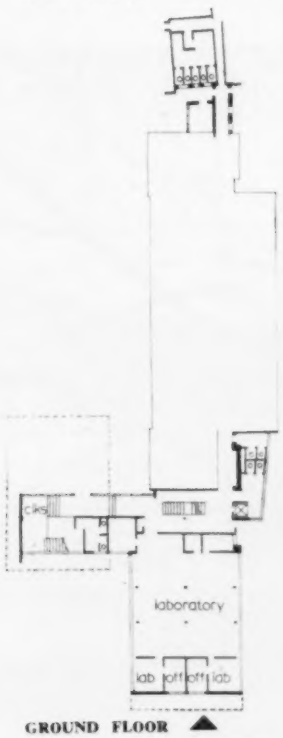
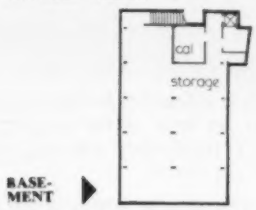


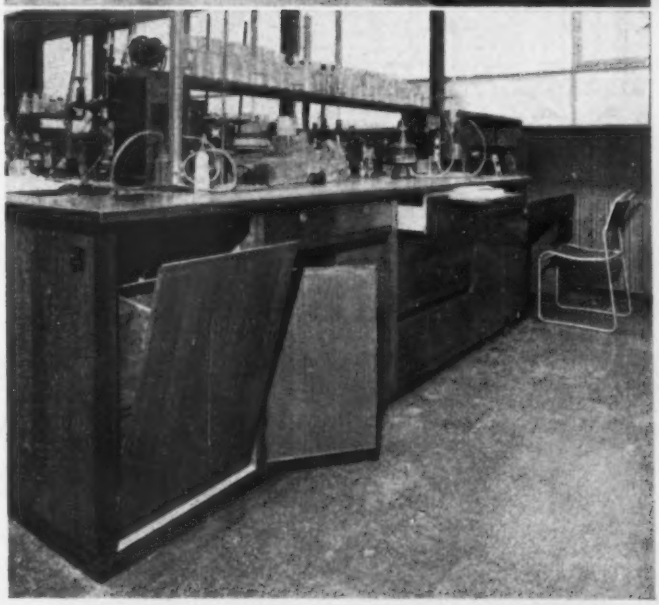
FIRST FLOOR ▲ SECOND FLOOR ▲



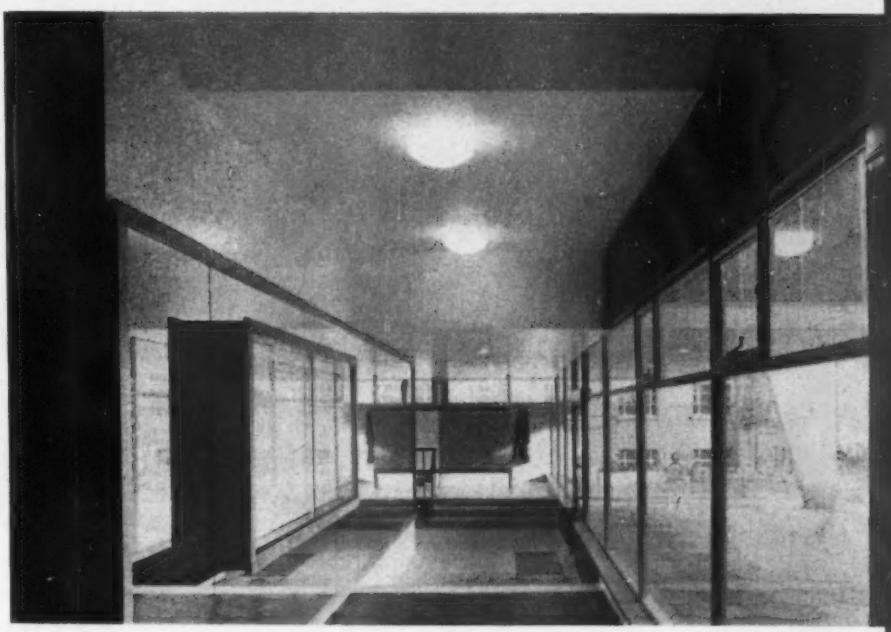
GROUND FLOOR ▲

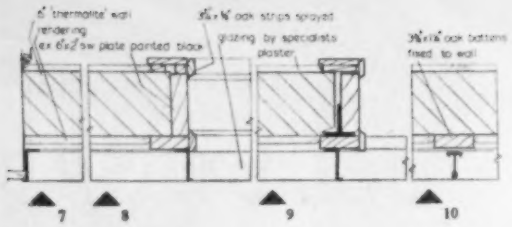


BASE-MENT ▶

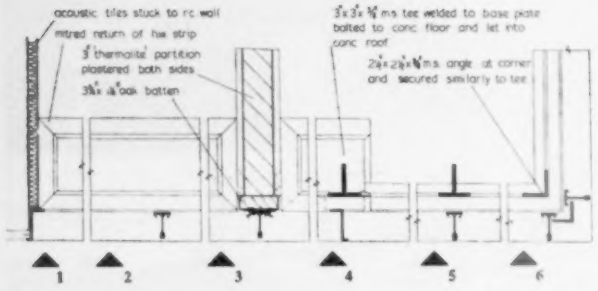


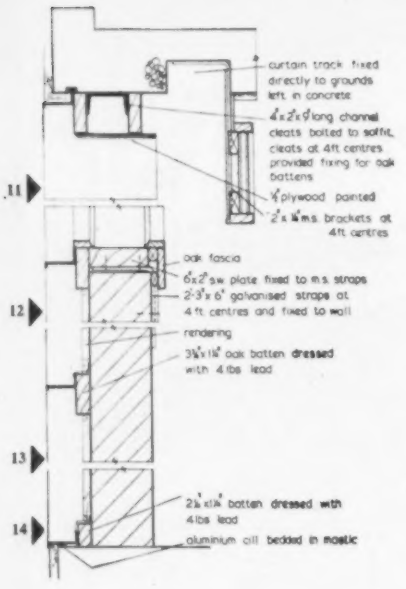
On the right, interior of teaching laboratory. Below, entrance foyer beneath the lecture theatre

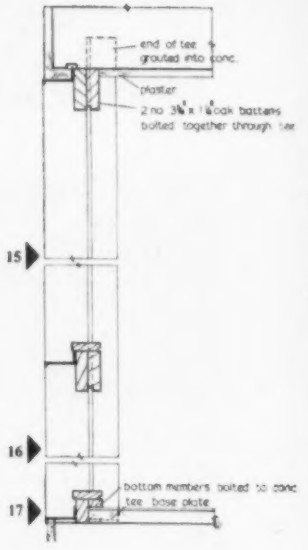




GLAZED WALL OF LECTURE THEATRE
SCALE : 1 IN=1 FT 3 IN
SEE KEY PLAN AT FOOT OF PAGE

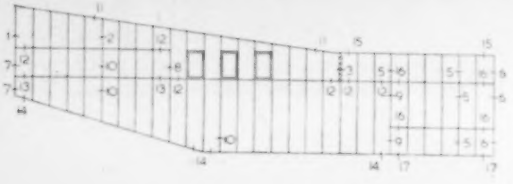






Inside the lecture theatre, the back wall is finished in plastic faced acoustic tiles arranged in a pattern. Structural columns are painted green, ceilings are white. The stepped floor of the auditorium is covered with black linoleum on a cork carpet, with rubber nosings along the edges of the steps

Above, the lecture theatre which is entered at first-floor level to avoid further encroachment on land in the congested science area and to establish a satisfactory relation with internal and external lines of circulation



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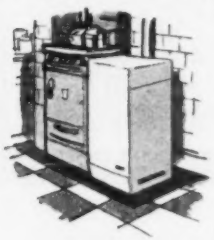

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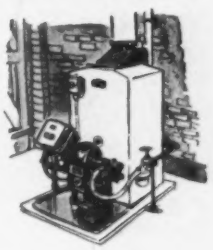

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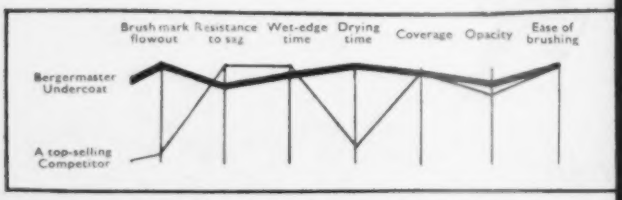

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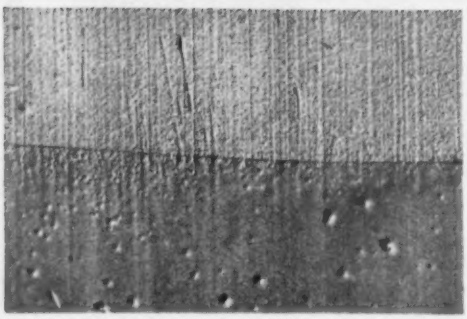
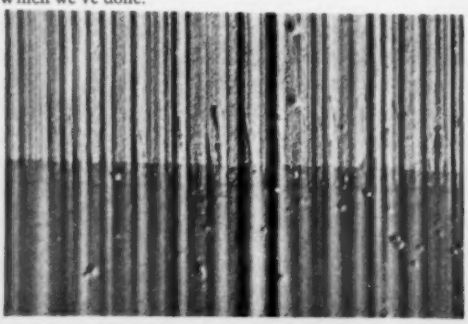


PROOF BY PHOTOGRAPHY—these shots, highly magnified, are absolutely unretouched or rigged in any way. Random samples were painted onto identical test surfaces (vertical) with identical brushes under identical conditions. See how (above) Berger Undercoat goes on smoothly so that its top coat inherits no brushmarks, and neither coat suffers sagging. You get a first class finish, in contrast with, for example, that shown in the lower photo; a top-selling brand. Both show dust marks, inevitable when you magnify *without* retouching. Which we've done.



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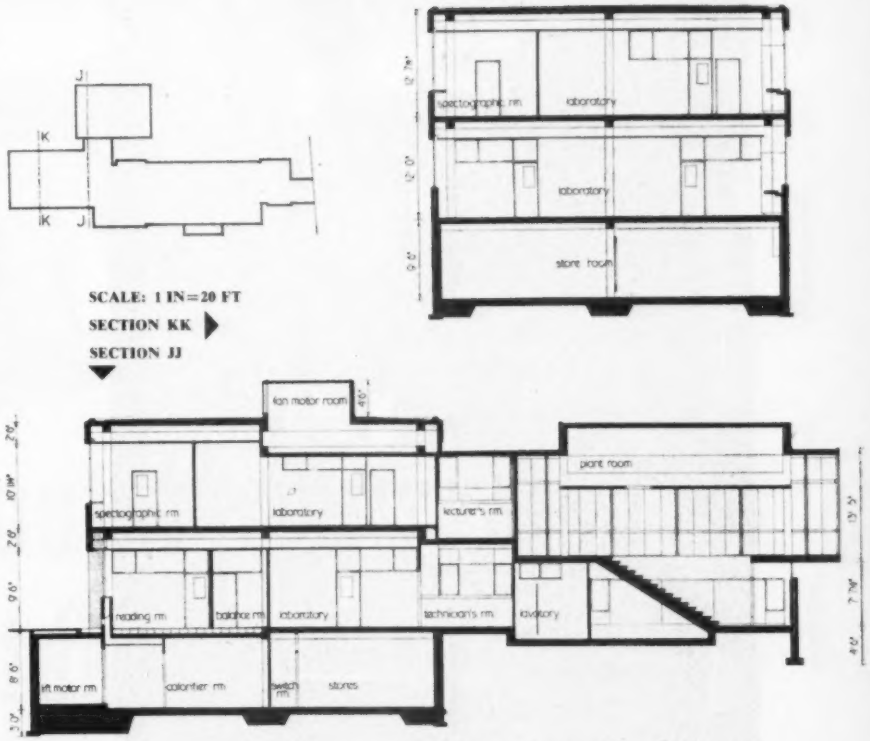
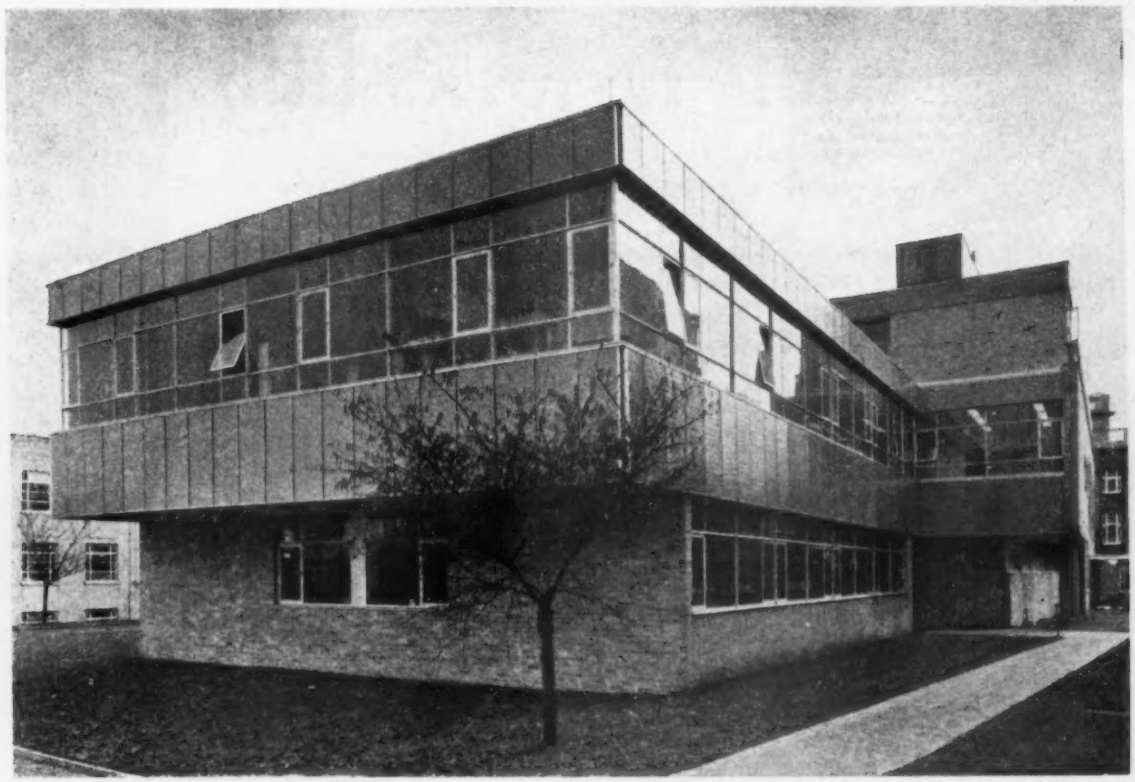
Lecture Theatre

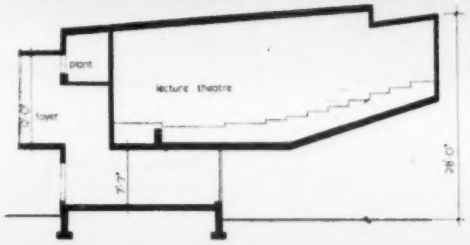
The construction is in reinforced concrete with solid slabs cast on a slope to follow the steps of the auditorium floor. The infill walls both in the theatre and in the upper foyer are formed with aluminium patent glazing with inserted opening lights. Where required, the glazing is backed with 6in insulation block walls colour-rendered on the outer face. Cast glass was used in front of the solid walls. Stairs are in grey reinforced terrazzo, supported on an r.c., spine beam. The stepped floor in the auditorium is of timber and is supported along upstanding concrete beams and in addition by honeycombed sleeper walls.

Externally, the blank wall at the end of the lecture theatre and the edges of the concrete slabs are finished in white Mineralite. The exposed soffit was sprayed with white render. The free-standing columns were bush-hammered to expose the aggregate. The render behind the cast glass is green in colour.

Internally, the walls, columns, and ceilings are plastered and painted. The demonstration bench is finished in natural teak and oak veneers. It has a black linoleum front. The auditorium seating is bench type of polished hardwood







Above, the latest extension with the old extension behind on the right. Left, long section through lecture theatre, scale: 1in = 20ft

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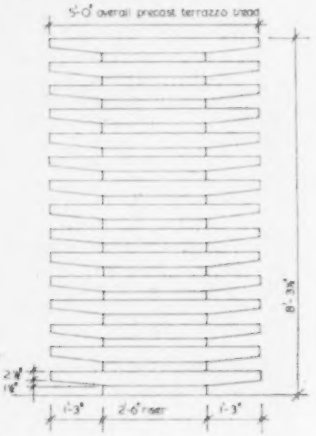
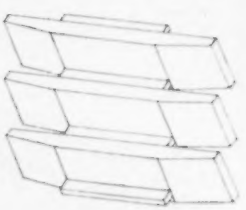
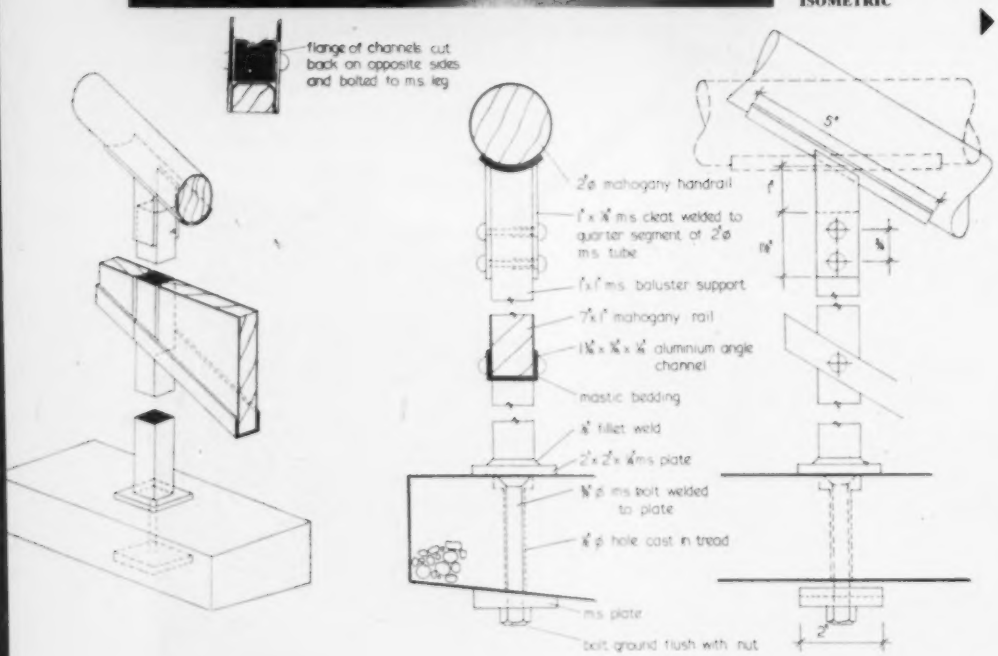
STAIRCASE SCALE : 1 IN=4 FT ELEVATION



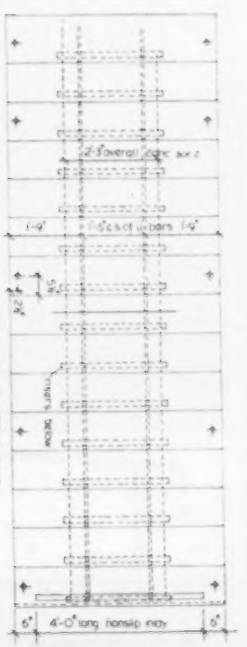
TREADS FROM BELOW ISOMETRIC




flange of channels cut back on opposite sides and bolted to m.s. leg
2"ø mahogany handrail
1" x ⅜" m.s. cleat welded to quarter segment of 2"ø m.s. tube
1"x 1" m.s. baluster support
2"x 1" mahogany rail
1½" x ½" x ¼" aluminium angle channel
mastic bedding
⅜" fillet weld
2" x 2" x ⅜" m.s. plate
⅝" ø m.s. bolt welded to plate
⅞" ø hole cast in tread
m.s. plate
bolt ground flush with nut
5"
10"
⅜"

DETAILS ABOVE SCALE : 1 IN=4 IN

PLAN



Above, the new staircase between the old extension to the Dyson Perrin's laboratory (right) and the latest extension (left). The staircase connects the new floor on the roof of the old extension, and all the floors of both extensions. The staircase consists of pre-cast terrazzo treads cantilevered from a spine beam

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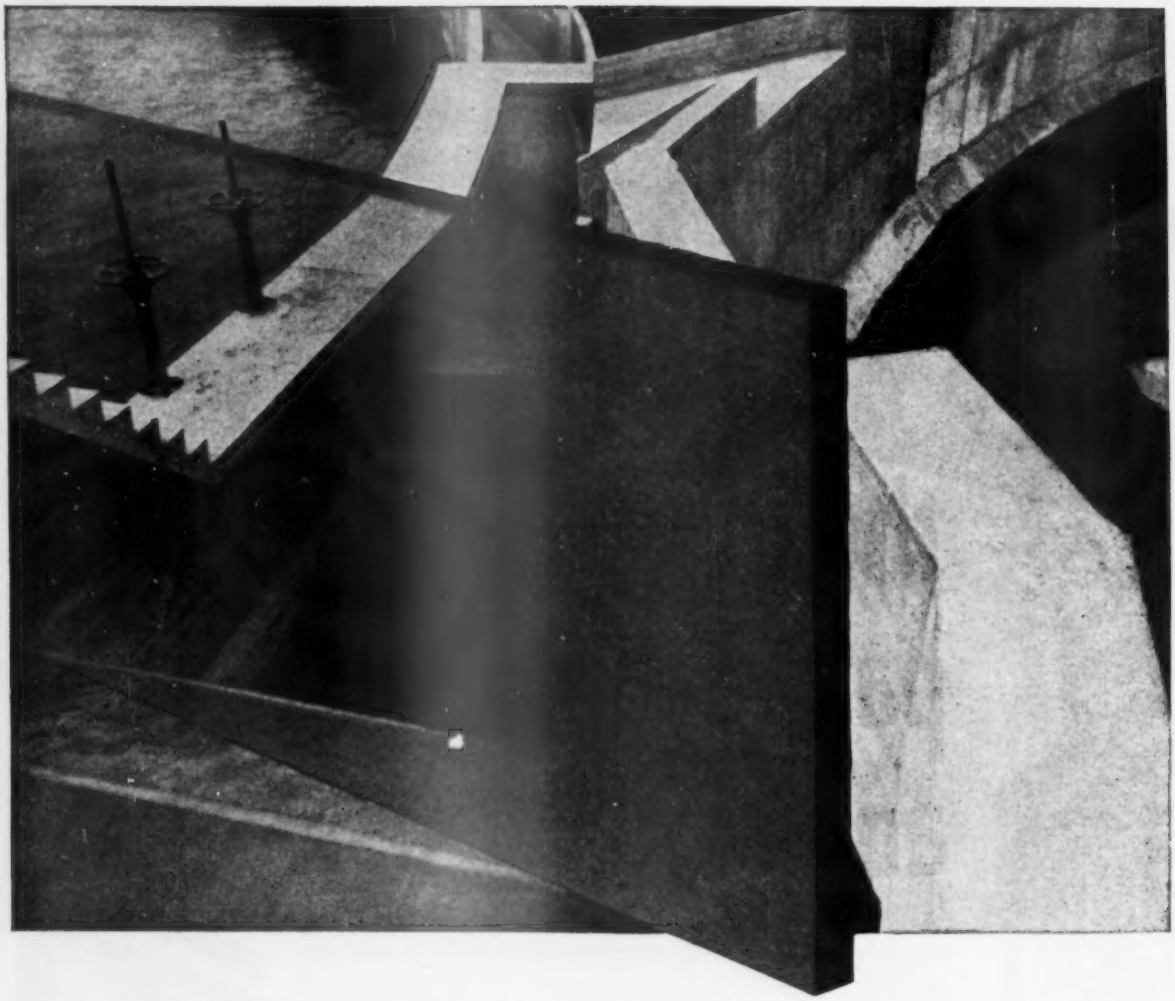

The constructional problems encountered in building this reservoir are similar to those found in a wide variety of water-retaining structures. It is imperative that joints between supporting columns and the floors are resistant to seepage and yet allow for any expansion or contraction between them.

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● Between 30 and 40 Atlas Alpha Three, 250W mercury fluorescent street lanterns, on Abacus steel columns, have been installed at two service areas on the new London to Birmingham motorway. These service areas, situated at Newport Pagnell and Watford Gap, near Daventry, incorporate a petrol station and restaurant for motorway travellers and are the first two sites to be developed in this way on any U.K. motorway. The lanterns used are cut-off versions of the standard Alpha Three and it is expected that over 100 will eventually be installed.

● Burton Span is the name given to a new division of Burton Constructional Engineering Co. Ltd., of Burton-on-Trent, Staffs. The new division has been formed to meet an increasing demand for prefabricated steel buildings. Burton Span structures are built on the plastics theory and the method of construction makes it possible to roof over an area of 120ft wide, entirely free from supporting columns.

● An air washer, with a capacity of 75,000 C.F.M. and constructed throughout with plastics materials, has recently been installed at the Stanlow Refinery of the Shell Oil Co. Ltd. It was manufactured by ManMil Plastics Ltd., working in conjunction with G. N. Haden & Sons Ltd. The washer is 14ft wide and 14ft high, and is a double bank opposed spray type. Six hundred nylon nozzles are used and Epikote epoxides and Carlona high-density polyethylene are amongst the principal plastics used.

● Some 70,000 sq ft of Stelvetite plastics-coated steel sheeting was used for partitioning the new London central buying offices of Lewis's Ltd. The new offices occupy the complete third and fourth floors of their new building at 40 Duke Street, London, W.1. Stelvetite is produced by John Summers & Sons Ltd. and in this instance was supplied and fitted by Luxfer Ltd., of Harlesden, London, N.W.10. All the corridors and internal office partitions for the third and fourth floors are of the Snead-type flush movable walling.

● S. H. Ware & Co. Ltd., flooring contractors, of Reading, have moved their London and Oxford branch offices to other addresses. These offices are situated at 106/108 King Street, Hammersmith, London, W.6 (telephone: Riverside 8727), and 1 St. Michaels Street, Oxford (telephone: 41562).

● A Westair Dehumidifier unit manufactured by Westool Ltd. has recently been installed in the seismograph room of Durham University. This is an underground chamber which is controlled within plus or minus 1 deg C and free circulation of air from outside is impracticable. As a result, humidity in the room builds up to within the region of 80 per cent R.H. (this is probably due in part to the drying out of the surrounding concrete). Previously, condensation produced liquid water on apparatus and documents became damp. When first installed, the dehumidifier extracted moisture from the air at a rate of 8 pints in three days. This has now fallen to 8 pints in seven days and it is stated that condensation has been eliminated and that documents remain crisp.

● James Halstead Ltd. have appointed Mr. L. G. Jennings as contract sales manager for their Poly-Flor division in the U.K.

● Mr. N. C. Macdiarmid, managing director of Stanton Ironworks Co. Ltd., has been elected to the board of Stewarts and Lloyds Ltd.

● Mr. Rudolph E. F. de Trafford has been elected chairman of Lewis Berger & Sons Ltd., in succession to Mr. Thomas Lilley. Mrs. V. Lilley has become vice-chairman.

● Thorn Electrical Industries Ltd. have appointed Mr. W. J. Vine as manager of their lighting advisory department.

● Mr. R. F. Summers, chairman of John Summers & Sons Ltd., has been appointed president of the British Iron and Steel Federation.

● Truscon Ltd. have moved their Birmingham reinforced concrete design office from their old address in Edmund Street to a new office at George House, George Road, Birmingham, 15 (telephone: Edgbaston 4391).

● Mr. J. R. Newman has been appointed managing director of Burn Brothers (London) Ltd.

● Mr. A. Davey and Mr. N. Aldcroft have respectively been appointed joint managing directors of Norris & Co. Ltd. Both companies are subsidiaries of Norris Warming subsidiaries of Norris Warming Holdings Ltd.

● Mr. E. R. Stuart, sales manager of Polybond Ltd., has been appointed sales director.

● The telephone number of Higgs & Hill Ltd., of Crown Works, South Lambeth Road, London, S.W.8, has been changed to Reliance 7688.

● Mr. A. G. B. Allton, until recently general manager of Tarmac Vinculum Ltd., has been appointed sales manager of the Cornelly Equipment Co. Ltd.

Radiation (Large Cooking Equipment) Ltd. have completely equipped the kitchen and servery for Mobil Oil Co., at Birkenhead. The kitchen caters for 450 personnel, and the Radiation appliances include a three-oven Stratford Range, Keswick Steamer, Fish Fryer, Stratford Oven, Savoy Griller, two Delamere Hotclosets and a 28ft long Delamere Hot and Cold Service Counter

NEW PRODUCTS

In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer

New Wallboard

Halltex insulation board, manufactured by Sammon Rulla OY., of Finland, is now available in this country. The board is suitable for interior wall and ceiling panellings and combines an attractive appearance with good thermal insulation and acoustic absorption properties. Basically the material used is a ½in porous wood fibreboard with a more compact and durable surface than that of ordinary insulation board, in order to make it suitable for wall panelling. The available surfaces are a strong white kraft paper in diamond and reeded patterns, an aluminium foil in diamond pattern, and a reeded textile surface. The insulation board is embossed with all these surfaces and bonded with a plastic adhesive which also acts as a primer. One coat of any of the commonly used emulsions, distempers or oil paints is sufficient when redecorating and, owing to the texture of the surfaces, the consumption is very small. The boards can be left in their natural state, but a weak mixture of an amyl-acetate lacquer and spirit thinner should be applied to keep the surfaces bright and to enable them to be sponged clean. It is claimed that dust is not easily attracted and that the lacquer will neither discolour the boards nor destroy their working efficiency. A secret nail joint has been developed with grooves, extending under the surface of the boards, into which plywood or paper fillets are inserted to leave open joints which allow contraction and expansion to go unnoticed. A bevelled butt joint can be supplied as an alternative. The boards can be mounted directly onto walls and ceilings, but the use of battens is recommended so as to leave an air space to increase the thermal efficiency. Acoustic boards can be supplied with grooves cut into the reeded paper-surfaced boards. Halltex is supplied in varying tile and panel sizes, with all joints and fillets included. Nominal thickness: 12mm. Weight (approx.): 3·5 kg/sq metre. Modulus of rupture: 27-33 kg/sq cm. Thermal conductivity: 0·33 B.Th.U./hr/sq ft/ deg F/in.

Leary's Fibreboards Ltd., King William Street House, Arthur Street, London, E.C.4. Mincing Lane 2424.

Readers' Information Service, Ref. A. Date 20/1/60.

C

★

New Sanitary Ware Fittings (B)

A new range of chromium plated combination fittings has been introduced for lavatory basins, baths, showers and bidets. The name Kingston associates them with the new vitreous china sanitary ware of that name but they are available for use with other "Standard" equipment. The fittings are of modern design as will be seen from our illustration which depicts the fittings for the "Standard" lavatory basins. They are available with either pop-up waste or plug and chain for basins.

Ideal Boilers & Radiators Ltd., Ideal House, Great Marlborough Street, London, W.1. Gerrard 8686.

Readers' Information Service, Ref. B. Date 20/1/60.

★

New Oil-fired Boilers (C)

Two new Blue Flame domestic boiler units have been added to this firm's range of heating appliances. They are the Reading Models Nos. 50 and 60 with respective outputs of 50,000 and 60,000 B.Th.U./hr. They are designed to fit flush with the wall and incorporate such special features as a separate feed to the pilot light which burns 1/10 pint of oil per hour; a low return on either side of the boiler which is two inches in dia and situated 3½in from the floor; and a draught break which renders the boiler independent of flue draught. They are considered suitable for use with all types of central heating including small bore systems and are stated to have been tested and approved by the major oil companies. The boilers are of welded steel construction and a soot door is provided for easy access to all parts of the flueways for cleaning. Resin bonded fibreglass insulation is provided between the boiler and the cabinet. There is a Teddington control box with a metering valve, on/off button, safety trip-off and filter, and this is enclosed in the boiler cabinet. The models will supply respectively 62 and 75gal of hot water only per hour or they are capable of heating 312 and 375 sq ft of radiator surface only. When required for both heating and domestic hot water supply, Type 50 will supply 30gal of water and 247 sq ft of heating surface or 40gal of water and 219 sq ft of heating surface and Type 60 will supply 30 gal of water and 309 sq ft of heating surface or 40gal of water and 281 sq ft of heating surface. Oil consumption: Maximum, 3·25 pints per hour and 4 pints per hour respectively; minimum 1/10 pint per hour for both models. Overall dimensions: 36in high by 22½in wide by 22½in deep. Finish: Stove enamelled.

B

Groveley Heating Ltd., Cardiff Road, Reading, Berks. Reading 50458.

Readers' Information Service, Ref. C. Date 20/1/60.

★

Sliding Door Gear

Cubbard sliding-door gear for cupboards and cabinets is now packed in a polythene wrapping. Each pack contains two lengths each of top and bottom rails, two pairs of rollers, either back face fixing or mortice type and two pairs of top guides complete with all fixing screws. This quantity is sufficient to enable two doors to slide past each other. 3ft, 4ft, 5ft and 6ft size packs for mortice fixing cost respectively, 21s 8d, 25s 4d, 29s and 32s 8d. Back face fixing packs of the same sizes cost 23s 4d, 27s, 30s 8d and 34s 4d.

Coburn Engineers Ltd., Coburn Works, Peasmarsh, nr. Guildford.

Readers' Information Service, Ref. D. Date 20/1/60.

GAYMEL EGGSHELL ENAMEL

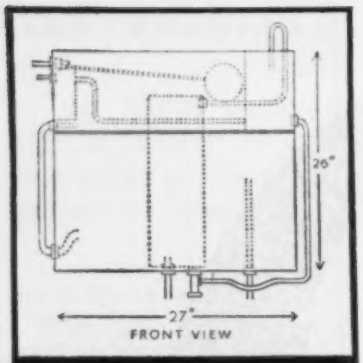
First came Gaymel Enamel, then the new Gaymel Flat Enamel and now GAY'S introduce a further addition to their superb range of finishes – GAYMEL EGGSHELL ENAMEL.

This is an exceptionally high quality enamel for interior use. It gives a true 'eggshell' sheen with a toughness and durability that withstands frequent washing. Gaymel Eggshell Enamel has a semi-paste consistency and can be applied coat on coat – without a separate undercoat – by brush, roller or spray. It is available from stock in 36 intermixable colours selected from Gay's Architect's Range.

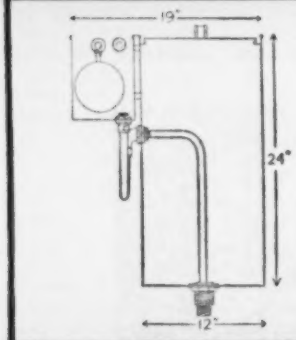
For really top class results, with less time and labour, specify GAYMEL EGGSHELL ENAMEL, another sound paint by Gay's.

Write for full information and shade cards to:—

R. GAY & CO. *93/97 New Cavendish Street, London, W1*



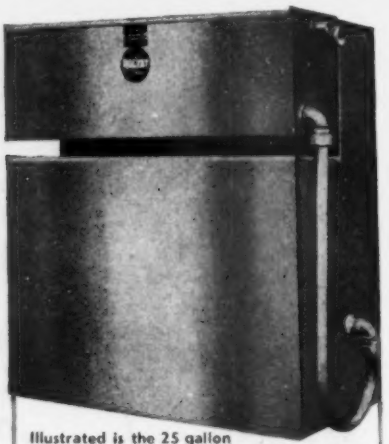
THE CALORIFIER



THE DURHAM

A BIG saving on installation costs

Rolyat tanks represent a saving all along the line, quite apart from the extra quality which is built into them. Special tanks are made for awkward situations at no extra cost, and an advisory service is at your command for any installation. They are specified by local authorities, Architects and Heating Engineers throughout the country.



Illustrated is the 25 gallon "Rolyat" recessed "Durham" tank. Please send me details of the range of "Rolyat" tanks.

NAME _____

ADDRESS _____

_____ A/1

ROLYAT PATENT HOT WATER TANKS

THE ROLYAT TANK CO. LTD. CROMWELL RD. YORK

---

savings in steel

DENISON FRENCH

Steel is at the core of a good building. We have been designing structural steelwork for 32 years, improving the quality, cutting the steel weight, often by 20% or more, and speeding up deliveries.

Advice and design suggestions are freely given at the initial stages to save the cost of later modifications.

DENISON FRENCH LTD.
CONSTRUCTIONAL ENGINEERS
67 CHANCERY LANE, LONDON, W.C.2
TELEPHONE HOL 2587

NEW PRODUCTS (continued)

New Cable Fixers

A new system has been introduced for securing cable, conduits, tube or hose from ¼in to 3½in dia to brick, concrete, stone, wood, etc., either indoors or outdoors, with clips and bases. The system is known as Briticent Plasticlips and these are made of super-polyamide Rilsan. The Plasticlips are ¼in wide and are available in four lengths for use according to the size of the cable. They can be slipped into a wall stud base which should then be driven home into the material to which the cables are to be fixed. To do this, a ⅝in dia hole should be drilled in the wall and the stud hammered in. Radial fins are provided which grip the walls of the hole and will resist a direct pull of 90lb. The clips can be used with a pedestal base which is screwed into position with wood or metal screws and which sits ¼in off the wall. The clips are then threaded into the base. The cables should then be placed in position and the clip closed and pulled up tight with a pair of pliers, and the free end of the clip can then be cut off flush. Serrated teeth on the clip grip the cable and the ratchet action of the teeth prevents the loosening of the clip, which can only be removed by cutting. Recommended clip spacing is one every 30in. Catenary suspenders can also be provided for suspending cables from overhead wires. These are available in two sizes and are shaped to envelop it when in position. Each suspender will accommodate any of the four lengths of clip and they are detachable only if the clip is cut open. In addition, a special clip No. 25 is designed for encircling and holding in position small cable looms or harnesses as used on electric switchboards, motor starters, computors, control cubicles, telephones, teleprinters and similar equipment, where many cables have to be bunched and held together.

British Central Electrical Co. Ltd., Briticent House, 6 & 8 Rosebery Avenue, London, E.C.1. Terminus 3666.

Readers' Information Service, Ref. E. Date 20/1/60.

★

New Curtain Track (F)

The Ghost curtain track is made of aluminium and employs nylon curtain insert hooks and end stops. Two types are made: Type H (illustrated) for horizontal surfaces such as lintels, ceilings, pelmet boards, etc., and Type V for vertical surfaces such as wall faces and window frames, and this type can also be used for horizontal surfaces. The track is very small and will fix flat to the ceiling or wall and can be left exposed without using pelmets. Separate brackets are not required for fixing and the track can simply be screwed home by using wood screws at 1ft centres in holes which are already provided. It is claimed that the nylon runners are smooth and silent in operation and that the hooks on them fit direct into any type of curtain tape. The track is sold in lengths of 3, 4, 5, 6, 7 and 8ft and the fittings are supplied in packets for each length of track. The track can be easily cut to size, but care should be taken that the end which has the runner insert slot should not be cut off. Generally speaking, hooks should be spaced in curtain tape at about 4in apart and the anchor fixing screws should then be tightened making sure that one anchor partly covers insert slot.

Haggard Robinson & Co. Ltd., 6 Stanley Park Road, Wallington, Surrey. Wallington 1181.

Readers' Information Service, Ref. F. Date 20/1/60.

★

Modified Chain Saw (G)

The Mark II version of the R8F gear-reduction petrol chain saw has recently been introduced. It is lighter in weight but sturdier than its predecessor, and is designed for extra heavy duty and for cutting widths from 23in to 49in. It is equipped with a Villiers 5 h.p. 8F petrol engine and the saw-chain is a Danarm-Oregon ¼in pitch chipper chain. A unique feature of this saw is that by refitting the cutter bar and chain, it is possible to change from a cross-cutting position into an especially low tree-felling position, and although it is not essential to change the cutter bar from one position to another, the choice of positions is an advantage when low cutting is desirable.

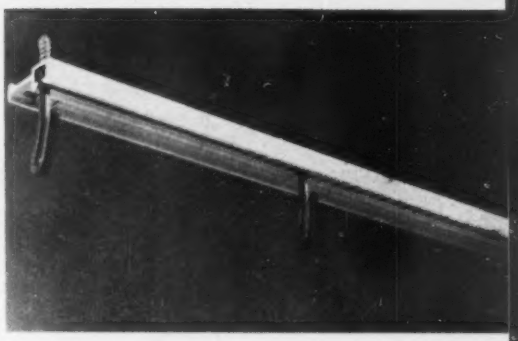
J. Clubley Armstrong Danarm Ltd., Abford House, Wilton Road, Westminster, London, S.W.1.

Readers' Information Service, Ref. G. Date 20/1/60.

★

Mobile Tower Cranes

The Industrious, Challenger and Vigorous are the three latest additions to the Coles range of cranes. All are mobile tower cranes and have respective lifting capacities of 2½ ton at 25ft radius, 3 ton at 30ft radius and 5 ton at 30ft radius. When fitted with the standard 30ft centres strut jib they will each lift to a height of 43ft. Because of their dual role of tower cranes and conventional strut jib cranes, the new models should be found suitable for cargo handling, shipbuilding and the building industry. They are basically of similar design with a fabricated steel-



tube structure mounted on the crane superstructure and jib pivot situated approximately 20ft above ground level. The driver's cab is at the top of the tower, i.e., about 30ft from ground level. The tower structure can be raised and lowered without the aid of other plant so that the units can travel under bridges and overhead wires, etc. Power is supplied by means of a diesel engine on the crane's structure which is coupled to a variable voltage generator which supplies the current to the separate motors of the hoist, derrick, slew and travel motions, and operation can be carried out from either the tower cab or the superstructure cab. Safety features include automatic limit switches for load and derricking; electro-mechanical brakes to hoist, derrick and slew motions and a safe load indicator which gives both audible and visual warning and will automatically cut the circuits of the hoist and derrick motions at predetermined overloads. The superstructure is full circle slewing in either direction and the chassis is fabricated from rolled steel sections and plates. The driving axle is of the fully floating type with overhead worm and wheel reductions.

Steels Engineering Products Ltd., Crown Works, Sunderland. Sunderland 56281.

Readers' Information Service, Ref. H. Date 20/1/60.

G

NEW PRODUCTS (continued)

Electrical Hand Dryer

The Schott electrical hand dryer, which is of continental origin, is now available in this country. It is suitable for use in such places as hospitals, laboratories, hotels, cinemas, offices and schools. It consists of a cabinet containing a Universal electric motor which will run for 300 hr without service, after which period the carbon brushes should be renewed. For this purpose, screws on the outer cover should be removed and the cover slipped off downwards; then the new brushes can easily be inserted. The motor itself should be regreased after 5,000 working hours. The hand switch at the top of the cabinet should be depressed and this action will allow 60 sec for drying hands under the outlet at the base of the cabinet. If the air supply should be deliberately cut off, a fuse switches off the current automatically and when the heating element cools off the hand dryer will start working again. Electrical connections can be made either from the back or from the top. Overall measurements: 7½in by 5in by 4½in. Weight: 3lb approximately. Consumption: 700W. Current: A.C./D.C. Price £9 19s 0d.

Broadway Supplies Ltd., 33 Gt. Titchfield Street, London, W.1. Museum 6136.

Readers' Information Service, Ref. I. Date 20/1/60.

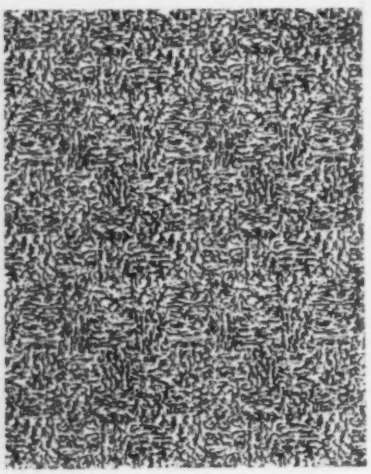
★

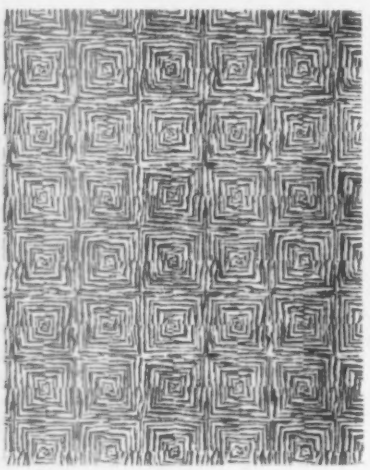
New Furnishing Fabrics (J)

This company has introduced some new designs of P.V.C. coated furnishing fabrics. These are Caprice (illustration (left) which is produced in seven colour ways—ivory, pimento, palm, silver grey, tan willow, lime and honeysuckle; it is available in two qualities, priced at 14s and 16s per ft; and Maze, also obtainable in six colour ways—pimento, zircon, greengage, nectarine, pompadour and honeysuckle, at 14s per ft. Both fabrics are produced in widths of 50in.

Bernard Wardle (Everflex) Ltd., Caernarvon, North Wales, Caernarvon 3243.

Readers' Information Service, Ref. J. Date 20/1/60.





J

★

Up-and-over Garage Doors

Marley Multiple garages can now be supplied with an up-and-over door and to do this the height of the garages is increased by 6in. It is hoped that the Master and Medium ranges will also be available with these doors. In the up position, the door is fully housed and does not project beyond the face of the garage. The mechanism of the door incorporates cantilever steel side arms operated by robust oiled springs with tension adjusters to give the maximum side and head clearances. The door is made in mahogany faced panels (external grade, resin bonded) with stout timber frames and twice-weathered horizontal rails. The standard door is delivered unprimed, so that it can be stained, varnished or painted to suit the requirements of the site.

Marley Concrete Ltd., Peasmarsh, Guildford, Surrey.

Readers' Information Service, Ref. K. Date 20/1/60.

★

New Spin Dryer (L)

A new electric spin dryer, Model A.1000, is a recent addition to the Frigidaire range of non-refrigeration appliances. It is streamlined in appearance and it has a new type of automatic cut-out, a new rust-proof upper assembly and improved safety features. The cut-out is a mechanical clock-type timer which is set to cut-out the motor at the end of each spinning cycle. The motor is also cut-out when the lid is lifted and this action also applies a brake and at the same time automatically resets the cut-out mechanism. The lid can be lifted during operation as many times as required for the timer resets itself on each occasion and in this way the machine will run for about four minutes after the lid has been finally closed. The top assembly is of plastics, the lid and the top being moulded in high impact polystyrene. An additional safety factor is that extra strong springs are fitted to the brake mechanism. The drum of the spin dryer revolves at a speed of 2,800 r.p.m. and thin slots are sited round the middle of the drum wall through which the water is extracted without the clothing being dimpled. A three-core electrical lead is provided and can be stowed away by means of two cellulose plastics cleats which are fitted to the rear of the dryer. The dryer stands on three rubber feet and can be tilted by means of a chromium plated handle situated in the front of the machine. This action brings two recessed transportation wheels into contact with the floor so that the machine can easily be wheeled in any direction. Capacity: 6lb dry weight of clothing. Power consumption: 300W; voltage range: 200/220 and 230/250 A.C. Overall dimensions: 24½in high by 15in dia. Finish: white or cream; the steel drum is finished in vitreous enamel. Price: 28gn.

L

Frigidaire, Division of General Motors, Stag Lane, Kingsbury, London N.W.9. Colindale 6541.

Readers' Information Service, Ref. L. Date 20/1/60.

Lighting-up time . . .

Be it office or factory, shop or farm or . . . ! In short, wherever the need is for natural light, there should be **UNILUX** Translucent Sheeting. Lightweight **UNILUX**, in a variety of shades, can be supplied to conform with any standard profile and permits 85% light transmission with maximum diffusion. It is fire-retardant, shatter-and-shock proof, weather-proof, unaffected by climatic conditions, easy-to-work and easy-to-fix.

UNILUX is made by a member-company of the U.A.M. Group—a name synonymous with "better building"—whose bi-monthly bulletin **"U.A.M. GROUP INFORMATION"** is published to keep you informed of the Group's activities. May we add your name to our Mailing List ?

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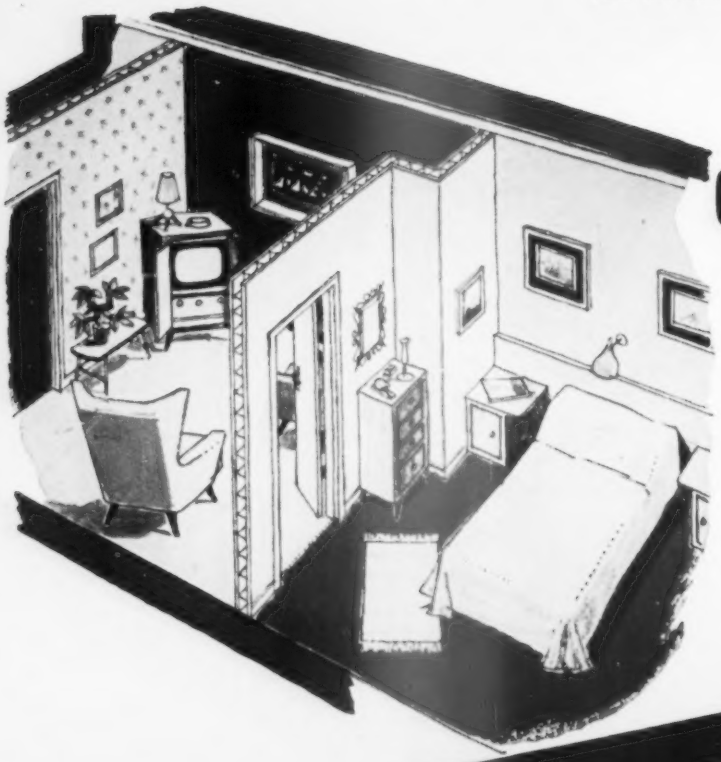
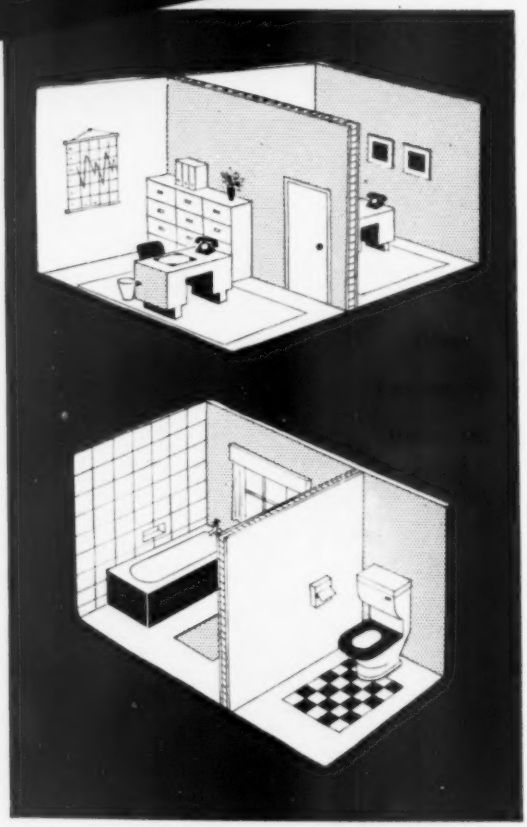


Quicker... more economical Construction and Conversion

Paramount Dry Partition



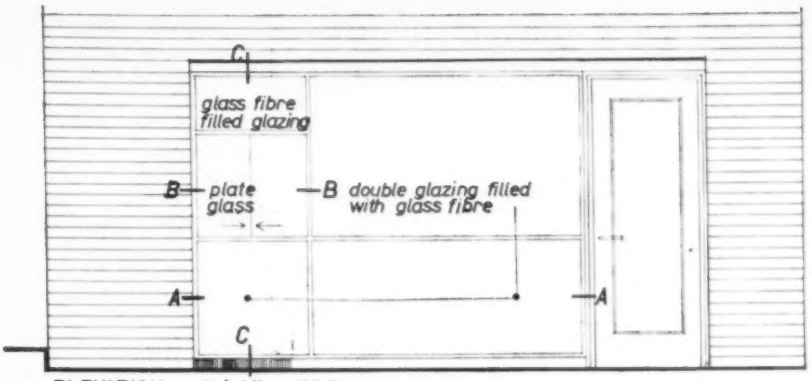
Ideal for inner linings to external walls, internal walls and partitions, Paramount Dry Partition is strong, rigid, easy-to-cut and handle. Light in weight, highly fire-resistant it has good sound and thermal insulating properties. Being a 'dry' product, it is ready for immediate decoration and saves hours of on-site labour. The accompanying illustrations give an idea of the impressive range of uses for this outstanding wall unit. Off-cuts have the same strength as the original panel and can be used for constructing built-in wardrobes, airing and meter cupboards etc. For full details about all Blue Hawk DRY CONSTRUCTION materials apply to:

THE
BRITISH PLASTER BOARD
(MANUFACTURING) LTD.

BATH HOUSE, 82 PICCADILLY, LONDON, W.1 TEL: GROSVENOR 5111

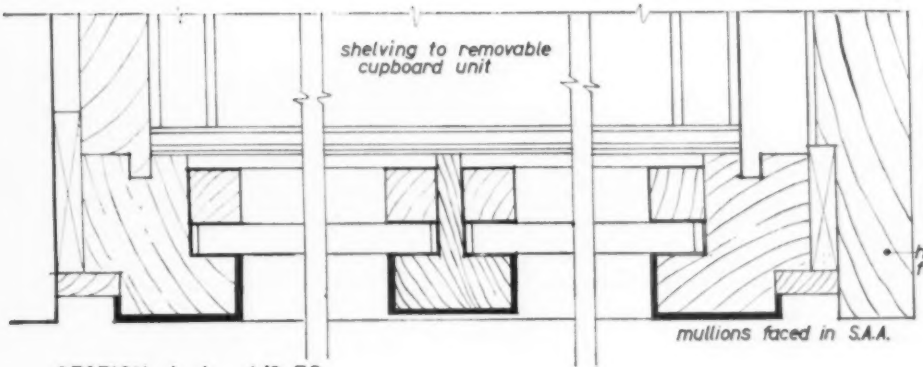
BLUE HAWK PRODUCTS

AP192

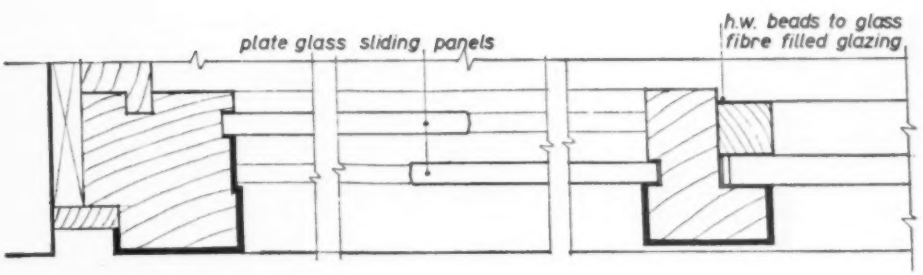


ELEVATION 1/4" - 1'0"

PLAN 1/4" - 1'0"



SECTION A-A 1/2 F.S.



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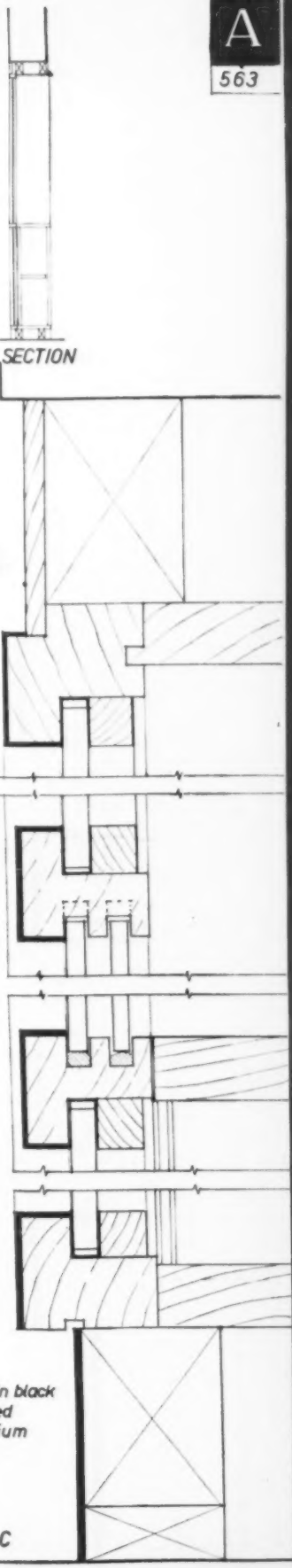


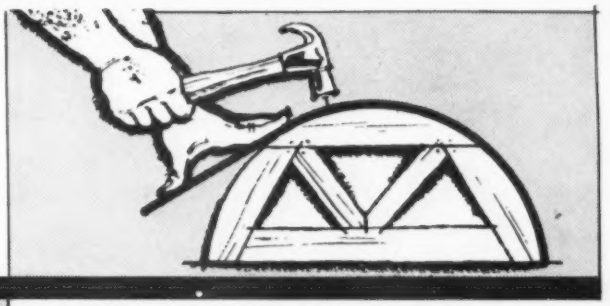
SECTION C-C

The frame of this reception desk in the entrance hall of the new laboratory for the Cambridge Instrument Co. Ltd. is of silver anodized aluminium on hardwood placed flush with the surface of a fair face buff brick wall. The infill panels are of double glazing filled with glass fibres. Those above and below the sliding plate-glass doors are grey-green, while the two to the right of these are white. The hardwood is sapele, and black anodized aluminium has been used for the plinth. Behind the screen there is a sapele top over a hardwood storage unit with white painted sliding doors and black ebonized sapele plinth. Architects: Edward D. Mills and Partners

RECEPTION DESK, LABORATORY, CAMBRIDGE

BEND IT

with ease to almost any curve. Even down to a radius of 1½" round a heated former.

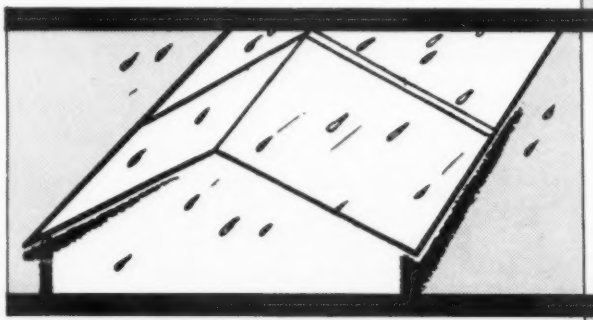


SAW IT

and note the hard, clean edge. It can also be chamfered, carved, rebated, combjointed and dovetailed, etc.

PAINT IT

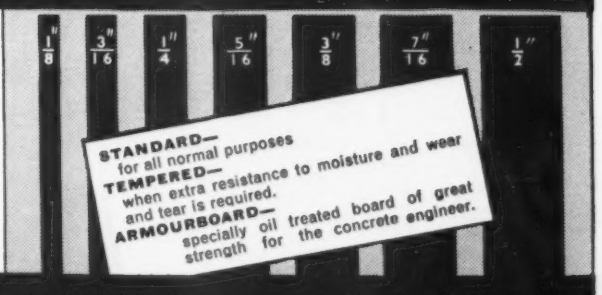
you'll get a better finish with Timberit and remember — no filling, sealing, or pre-sanding is necessary.



USE IT

externally as well as indoors. Timberit has remarkable weather resisting properties.

and GET IT in 7 thicknesses up to half-inch!


⅛" 3/16" ¼" 5/16" ⅜" 7/16" ½"
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ARMOURBOARD— specially oil treated board of great strength for the concrete engineer.

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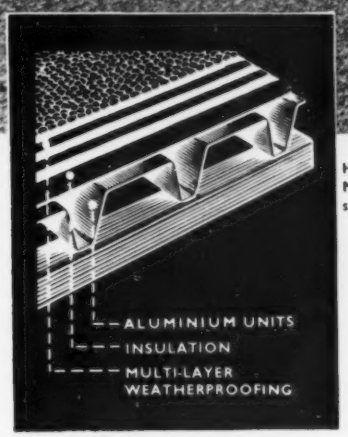

No. 5 and 6 Machine House, Bowater-Scott Tissue Mill, Engineering and Research Division Buildings.

ARCHITECTS : Farmer and Dark, London, S.W.1.
MAIN CONTRACTORS : No. 5 and 6 Machine House, Messrs. Higgs and Hill Limited, London, W.8. Bowater-Scott Tissue Mill and Engineering and Research Division Buildings, Messrs. Holland & Hannen and Cubitts Limited, London, S.W.1.

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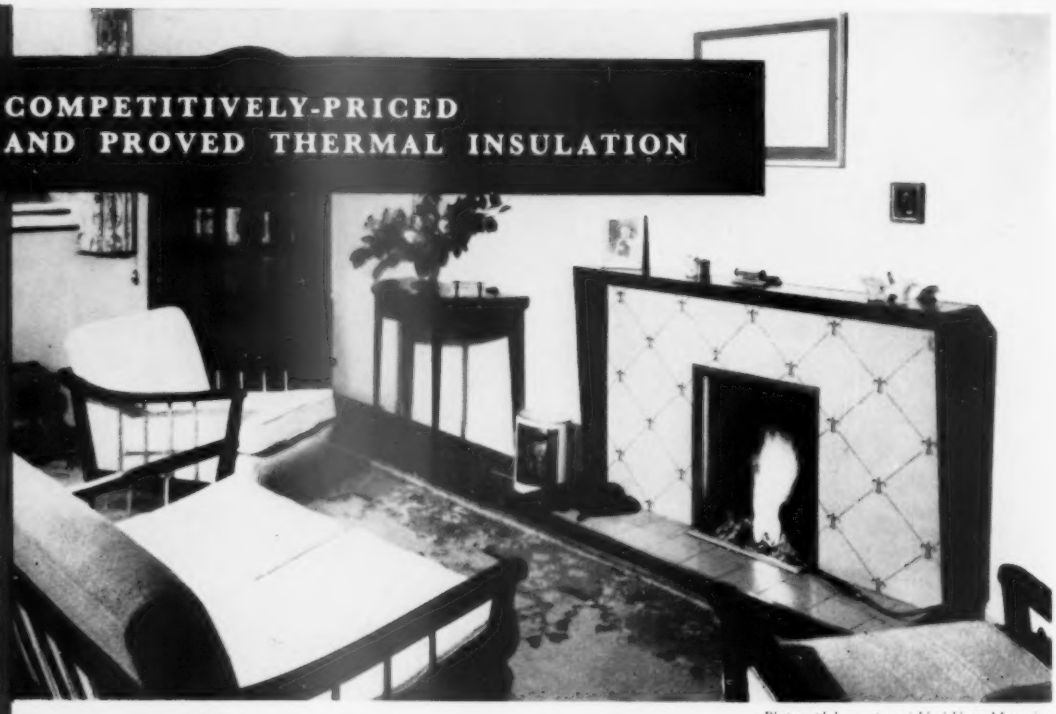

Photograph by courtesy of Ideal Home Magazine.

At "New Britwell", a house at Maidenhead. *Architect:* Michael H. H. Bayley, A.R.I.B.A.

PRACTICAL CONSTRUCTION

ROOF
Tiles on felt
2-3 inches slag wool.

CEILINGS
Plasterboard and skim coat.

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Ground floor: 4½-in. brickwork, 2-in. cavity, 4-in. Thermalite, two-coat plaster.
First floor: Tyrolean rendering, 3-in. Thermalite, 2-in. cavity, 4-in. Thermalite, two-coat plaster.

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"The only further comment that I can add after nearly three years' occupation is that the heating system was unnecessarily large, the bedroom radiators only being used occasionally and it is only during very cold spells that it has to be stoked more than every other day."

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The thermal conductivity (k) of cellular concrete of 50 lbs. cu. ft. density according to the I.H.V.E. guide 1955 conditioned at 64° F 65% R.H. = 1.4 B.T.U.'s etc. This corresponds to the normal conditions in the average heated home during the winter months where a Thermalite inner leaf will have an equilibrium moisture content of approximately 4%

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CONTRACT • NEWS •

*Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate: (a) type of work (b) address for application. Where no town is stated in the address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.*

OPEN

BUILDING

ABERCARN U.C. (a) Construction of 152 houses at Trinant housing site, Crumlin. (b) Engineer, Council Offices, Abercarn. (c) 3gn. (e) January 26.

* * *

ALTRINCHAM B.C. (a) Erection of four three-storey and two four-storey blocks of flats and maisonnettes in New Street area. (b) Frank Bradley, 4 New Street, Bolton. (c) 3gn. (e) January 25.

* * *

BASINGSTOKE B.C. (a) Erection of aged persons' dwellings comprising ten bungalows and one block of 12 flatlets with warden's accommodation and communal sitting room, St. Peter's Road. (b) Borough Architect, Municipal Buildings. (c) 2gn. (e) February 2.

* * *

BOURNEMOUTH B.C. (a) Improvement and repairs to school house, Pound Lane, Kinson. (b) Borough Architect, Room 106, Town Hall. (c) 1gn. (e) February 5.

* * *

BURY. (a) Internal and external decoration of portion of the Town Hall. (b) Borough Engineer, Town Hall. (e) January 30.

* * *

CAMBRIDGE C.C. (a) Erection of a science laboratory, drawing office and ancillary works, comprising 2,250 sq ft floor area in permanent construction at Young Street Further Education Centre. (b) City Surveyor, Guildhall. (c) 2gn. (e) February 12.

* * *

CANTERBURY C.C. (a) Erection of new kitchen accommodation at Frank Hooker Secondary School, London Road. The kitchen will be an extension to existing premises. (b) City Architect and Planning Officer, Municipal Buildings. (d) January 22. (e) February 15.

* * *

CARDIFF C.C. (a) Construction of two annexes at the existing "Preswylfa" occupational and training centre, Clive Road, Canton, comprising two single-storey buildings for classrooms, cloakrooms, lavatories, etc. (b) City Architect, City Hall. (c) 2gn. (e) February 10.

* * *

CARMARTHEN C.C. (a) New holding to be provided at Lower Court estate, St. Clears. (1) Erection of a farm homestead; (2) erection of farm outbuildings; (3) ancillary works. (b) County Land Agent, 5 Queen Street, Carmarthen. (c) 2gn. (d) January 21. (e) January 28.

* * *

CHESTERFIELD R.C. (a) Building contractors wishing to be included on the Council's list of housing contracts should apply. (b) Engineer and Surveyor, Rural Council House, Saltergate, Chesterfield, giving details of similar work carried out. (d) January 31.

* * *

CHINGFORD B.C. (a) Extension to public convenience, Green Farm. (b) Borough Engineer, Town Hall. (c) 2gn. (e) February 1.

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H

COLCHESTER B.C. (a) Erection of 75 flats and houses on Greenstead site. (b) Borough Engineer, 1 West Stockwell Street, Colchester. (c) 10gn. (e) February 8.

* * *

CROYDON B.C. (a) Conversion of property in Birdhurst Rise into nine flats. (b) Borough Engineer, Town Hall. (e) February 3.

* * *

DENBIGHSHIRE. (a) Erection of a students' hostel comprising a two-storey domestic type load bearing structure for 60 students, with bed-sitting rooms, dining hall, kitchen, etc., and erection of a principal's house at Llysfasi Farm Institute, near Ruthin. (b) Architect, Grove Park, Wrexham. (c) 3gn. (d) Immediately. (e) March 7.

* * *

DOWN C.C. (a) Erection of a dining hall at Dundonald Primary School. (b) Offices of the Education Committee, 1 Wellington Place, Belfast. (c) £3. (e) January 28.

* * *

EAST RIDING OF YORKSHIRE C.C. (a) (1) Erection of an assembly hall and kitchen, together with alterations to existing school at North Ferriby. (b) County Architect, County Hall, Beverley. (c) £2. (e) February 2. (2) Additional practical and cloakroom accommodation at Withernsea High School. (b) County Architect, Beverley. (c) £2. (e) February 9.

* * *

ESHER U.C. (a) Contract 296. Erection of a Civil Defence training and recreational centre, a single-storey building 69ft by 25ft, construction in bricks and block work and covered in concrete pantiles. (b) Engineer and Surveyor, Council Offices. (c) 1gn. (e) January 25.

* * *

FINCHLEY B.C. (a) Alterations to biology laboratory, Christ's College, Hendon Lane, N.3. (b) Borough Engineer and Surveyor, 294-6 Regent's Park Road, London, N.3. (c) 2gn. (e) January 25.

* * *

FLINT C.C. (a) Erection of an ambulance headquarters and garages off Chester Road-King Street By-pass, Mold. (b) County Architect, Llwynegrin, Mold. (c) 3gn. (e) February 1.

* * *

GELLIGAER U.C. (a) Erection of 112 dwellings of various types, together with road finishing works, etc., in the first phase of Shingrid housing scheme, Trelewis. (b) Engineer and Surveyor, Council Offices, Hengoed, Glam. (c) 5gn. (e) January 28.

* * *

GREAT YARMOUTH B.C. (a) Erection on Magdalen College estate, Gorleston. (1) six type 4H/5 houses; (2) nine type 4H.5 houses; (3) 12 type 4F.9 and 12 flats; (4) five type 4H.5 houses; (5) 10 type 4H.5 houses. (b) Borough Engineer, Town Hall. (c) 2gn. (e) February 5.

* * *

HAMPSHIRE C.C. (a) Erection of Alverstoke new county infants' school at Gosport, in traditional construction, comprising six classrooms, assembly hall, kitchen, etc., having floor space of 9,500 sq ft. (b) County Architect, The Castle, Winchester. (c) 2gn. (e) January 25.

HEMEL HEMPSTEAD B.C. (a) Erection of four additional old persons' bungalows and site works, Adeyfield Road. (b) Borough Engineer, High Street. (e) February 1.

* * *

HUNTS C.C. (a) (1) Abbots Repton V.C. School, new small school, comprising three classrooms, site layout, etc. (d) January 22. (e) March 16. (2) Brampton C.P. School, small extension comprising classrooms, etc. (d) January 22. (e) March 11. (3) Holmes V.C. School, extension comprising hall, classrooms, etc. (d) January 22. (e) March 2. (4) Huntingdon Secondary School, large extensions comprising classrooms, etc., and site works. (d) January 22. (e) April 11. (5) Orton V.C. School, extension comprising assembly hall, boiler house, heating and some site works. (b) Applications for all the above to County Architect, County Buildings, Huntingdon.

* * *

ILFORD B.C. (a) Alterations at Fairlop Secondary Girls' School, Fencepiece Road, Barkingside. (b) Borough Engineer, Town Hall. (c) 2gn. (e) January 26.

* * *

MANCHESTER C.C. (a) Design, detailing and foundations, structural framework (in reinforced concrete or steel), reinforced concrete floors, stairs and flat roofs, for the proposed Civic Centre at Wythenshawe. (b) City Architect, P.O. Box 488, Town Hall. (e) February 19.

* * *

MANCHESTER C.C. (a) Office alterations at the Transport Department's Princess Road Garage, Moss Side. (b) General Manager, 55 Piccadilly, Manchester. (e) February 2.

* * *

MINISTRY OF COMMERCE, NORTHERN IRELAND. (a) Construction of a nest of three factories on site 11, Dunmurry Industrial estate, Dunmurry. (b) Room 33, Chichester House, 64 Chichester Street, Belfast. (c) £3. (e) January 25.

* * *

MINISTRY OF FINANCE, NORTHERN IRELAND. (a) Erection of seven houses at Greenmount Agricultural College, Muckamore, Co. Antrim. (b) Room 103, Law Courts Building, Belfast, 1. (c) £2. (e) January 25.

* * *

NARBERTH R.C. (a) Erection of six houses and four bungalows at Lower Court Road, Saundersfoot. (b) Clerk of the Council, Council Offices, Narberth. (c) 3gn. (e) February 4.

* * *

NEWBURY B.C. (a) Erection of 78 houses, Bath Road estate. (b) Borough Surveyor, Municipal Buildings. (e) February 5.

* * *

NEWCASTLE AND GATESHEAD JOINT FIRE SERVICES COMMITTEE. (a) Erection of a divisional fire station in Dryden Road, Gateshead. (b) City Architect, 18 Cloth Market, Newcastle-on-Tyne, 1. (e) February 8.

* * *

NEWCASTLE REGIONAL HOSPITAL BOARD. (a) Erection of a ward block at Ashington Hospital, total floor area 36,000 sq ft. (b) Secretary to the Board, Benfield Road, Newcastle-on-Tyne. (d) January 20 (today).

* * *

NORTH RIDING OF YORKSHIRE C.C. (a) Erection of Morton-in-Cleveland Primary School, near Middlesbrough. (b) S. Morrison & Partners, 103 Belper Road, Derby. (e) February 6.

NORTHUMBERLAND C.C. (a) Erection of stage one of a C.P. school at Old Hartley. (b) County Architect, County Hall, Newcastle-on-Tyne. (d) January 22.

* * *

OXFORD C.C. (a) Erection of a permanent brick sports pavilion at New Marston recreation ground. (b) City Engineer, Town Hall. (e) February 8.

* * *

PENZANCE B.C. (a) Erection of 70 flats on St. Clare Street. (b) Borough Surveyor, Municipal Buildings. (d) January 29.

* * *

RAWMARSH U.C. (a) Extensions to the public swimming baths consisting of an additional dance hall and refreshment bars. (b) Surveyor, Council Offices, Parkgate, Rotherham. (d) January 25.

* * *

READING B.C. (a) Erection of a lavatory block at George Palber Secondary School, Basingstoke Road. (b) Borough Architect, Town Hall. (e) January 25.

* * *

RISCA U.C. (a) Erection of five bungalows at the Copper Works, Danycraig. (b) Engineer and Surveyor, Council Offices, Risca. (c) 3gn. (e) February 9.

* * *

ROCHDALE B.C. (a) Erection of public conveniences at Dewhurst Road, Syke. (b) Borough Architect, Town Hall. (e) January 25.

* * *

SAFFRON WALDEN R.C. (a) Erection of six houses and six flats at Stansted Mountitchet. (b) Clerk of the Council, Council Offices, Debden Road. (e) January 30.

* * *

SWANSEA B.C. (a) Erection of an assembly hall, art and craft room and alterations and adaptations at Llwyn-y-Bryn Secondary School. (b) Cook, Rees & Tagholm, Barclays Bank Chambers, Wind Street. (c) £5. (d) January 22.

* * *

TILLICOULTRY B.C. (a) Erection of 64 dwelling houses on prepared sites. (b) Burgh Architect, 36 Walker Terrace, Tillicoultry. (d) January 25.

* * *

TYNEMOUTH B.C. (a) Erection of aged persons' dwellings at Beadnell Avenue, North Shields. (b) Borough Surveyor, 16 Northumberland Square, North Shields. (c) 2gn. (e) February 8.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

ASHTON-UNDER-LYNE B.C. (1) Erection of 57 flats, 22 houses and a nine-storey block of 90 dwellings. (2) Charlestown site. (3) Direct labour.

* * *

BARKING B.C. (1) 30 dwellings. (2) Howard Road. (3) Hawker-Smith Ltd., 130 Penhill Road, Bexley, Kent. (4) £55,074.

* * *

BERWICK-ON-TWEED B.C. (1) Erection of 32 houses. (2) Spittall Hall estate. (3) J. H. Pierce, Osborne Road, Tweedmouth, Berwick.

* * *

BOLTON B.C. (1) Erection of phase II of the Technical Teacher College. (3) Direct labour.

COCKERMOUTH. (1) 30 houses and 11 bungalows for North-Eastern Housing Association Ltd. (3) John Twiname Ltd., Brigham, Cumberland. (4) £58,221.

* * *

COVENTRY C.C. (1) Erection of the North Link shopping precinct. (3) John Laing & Son Ltd., Mill Hill, London, N.W.7. (4) £117,141.

* * *

DAGENHAM B.C. (1) Erection of 102 dwellings. (2) Limbourne Avenue redevelopment scheme. (3) Direct labour. (4) £181,824.

* * *

ESTON U.C. (1) Erection of 56 flats and maisonnettes. (2) Grangetown estate. (3) J. H. Fawcett, Normanby, Middlesbrough. (1) 32 flats. (2) Teesville estate. (3) Same contractors.

* * *

GLASGOW. (1) Construction of first stage of office block development. (2) City Centre, Waterloo and Blythswood streets. (3) James Laidlow & Sons, Rutherglen. (4) £250,000.

* * *

GLASGOW. (1) New departmental store for the House of Fraser Ltd. (2) Jamaica Street and Enoch Square. (3) Leslie & Co. Ltd., Peel Street, London, W.8.

* * *

HAVANT AND WATERLOO U.C. (1) Erection of 78 dwellings. (2) Waterlooville, Hants. (3) Faulkners, 113a London Road, Waterlooville, Hants.

* * *

HUDDERSFIELD. (1) Block of shops and offices for Norwich Union Insurance Societies. (2) High Street and Market Street. (3) John Radcliffe & Sons Ltd., St. John's Road, Huddersfield.

* * *

LEICESTER C.C. (1) Erection of 298 "Easiform" dwellings. (2) Eyres Monsell estate. (3) John Laing & Sons Ltd., Mill Hill, London, N.W.7. (4) £375,894.

* * *

LEWISHAM B.C. (1) Erection of 52 maisonnettes. (2) Silverdale. (3) Allen Fairhead & Sons Ltd., Sydney Road, Enfield. (4) £139,920.

* * *

LIVERPOOL C.C. (1) Erection of a health centre. (2) Mill Street. (3) R. J. Barton & Sons Ltd., Altcar Road, Formby, Lancs. (4) £94,286, tender includes 11 maisonnettes.

* * *

LIVERPOOL C.C. (1) 147 flats, etc. (2) Grant Road. (3) Direct labour. (4) £222,421.

* * *

LONDON, W.C. (1) Large extensions to office buildings for Pearl Assurance Co. Ltd. (2) Holborn. (3) Holland & Hannen and Cubitts (Great Britain) Ltd., 1 Queen Anne's Gate, London, S.W.1. (4) £440,000.

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LONDON C.C. (1) Blocks of flats. (2) Thornton Gardens estate, Wandsworth. (3) W. J. Simms, Sons & Cooke Ltd., Beddington Lane, Croydon. (4) £134,567. (1) Block of dwellings. (2) Ashburton estate, Wandsworth. (3) G. Ward (Ealing) Ltd., Uxbridge Road, London, W.5. (4) £53,272. (1) Blocks of dwellings. (2) Wade Street area, Poplar. (3) Kirk & Kirk Ltd., 287 Upper Richmond Road, London, S.W.15. (4) £89,434. (1) Block of flats. (2) Lawson estate, Southgate. (3) John Laing & Sons Ltd., Mill Hill, London, N.W.7. (4) £132,202.

* * *

NATIONAL COAL BOARD. (1) Erection of divisional stores. (2) Lambton, Co. Durham. (3) Holland & Hannen and Cubitts (Scotland) Ltd., Howden-on-Tyne. (4) £220,000.

* * *

NORMAN CROSS R.C. (1) Erection of 52 houses. (2) Broadway, Yaxley. (3) H. J. Firman Ltd., Newark Road, Peterborough. (4) £72,707.

* * *

NORWICH C.C. (1) 70 dwellings. (2) Hall Road area. (3) R. G. Carter Ltd., Drayton, Norwich. (4) £152,044.

* * *

N.W. METROPOLITAN REGIONAL HOSPITAL BOARD. (1) Erection of a 24-bed nurses' hostel. (2) King Edward VII Hospital, Windsor. (3) E. H. Burgess Ltd., 34 Grosvenor Gardens, London, S.W.1. (4) £26,970.

* * *

OXFORD C.C. (1) Erection of 60 maisonnettes. (2) Former Gas Board site. (3) John Laing & Son Ltd., Mill Hill, London, N.W.7. (4) £176,462.

* * *

PLYMOUTH C.C. (1) Reinstatement of 21 war-destroyed flats. (2) Ordnance Street. (3) Direct labour. (4) £61,135.

* * *

RAWTENSTALL B.C. (1) Erection of 62 dwellings. (2) Booth & Bridleway. (3) Gregory Housing Ltd., Farncombe Road, Worthing. (4) £69,741.

* * *

SALFORD C.C. (1) Phase II of secondary school. (2) Clarendon. (3) Direct labour. (4) £178,000. (1) Erection of 56 maisonnettes. (2) Regent's Park. (3) Direct labour. (4) £11,000.

* * *

SHEFFIELD C.C. (1) Erection of 217 dwellings and 41 garages. (2) Gleadless Valley estate. (3) M. J. Gleeson (Contractors) Ltd., Sheffield. (4) £347,889.

* * *

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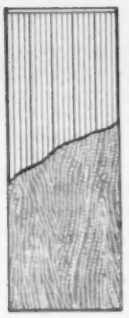
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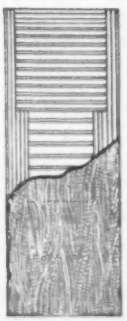
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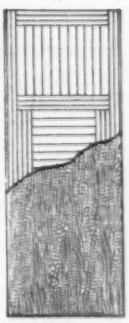
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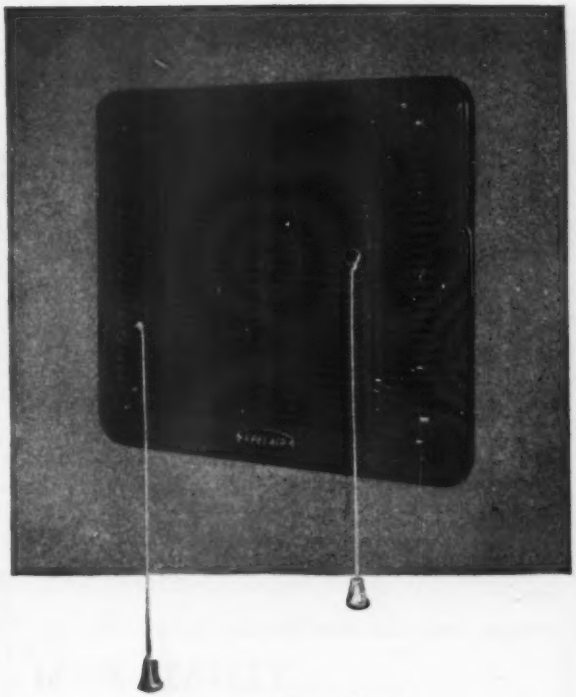

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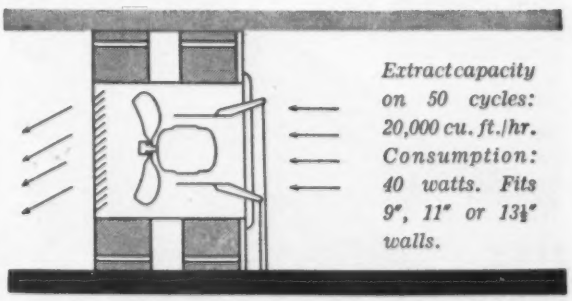

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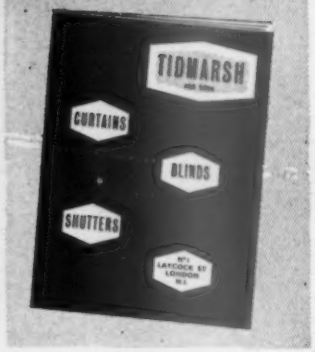

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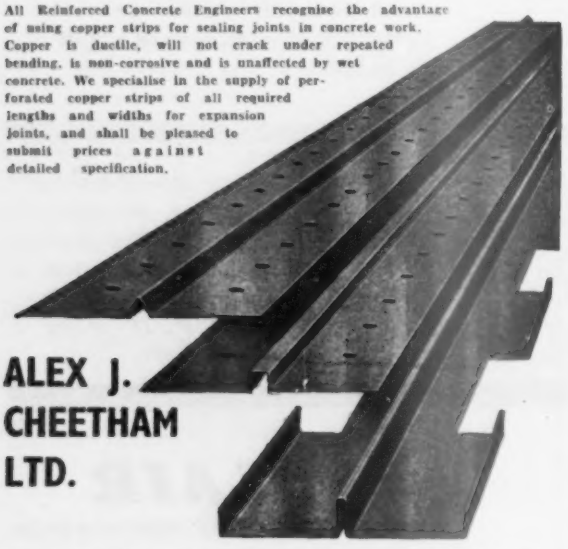

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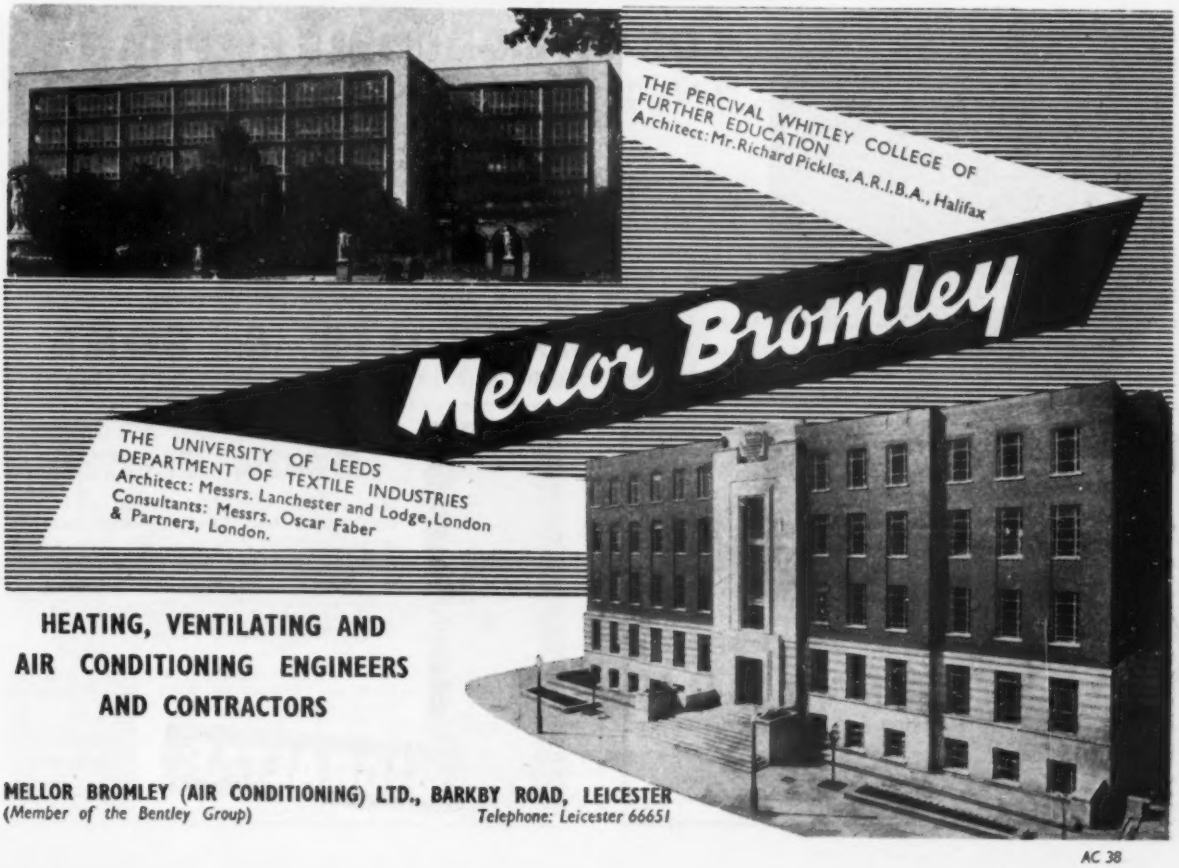
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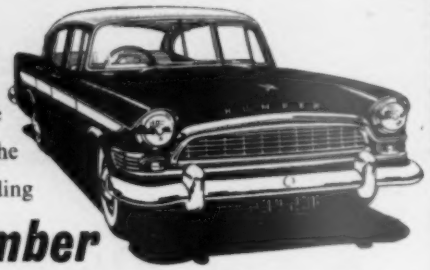

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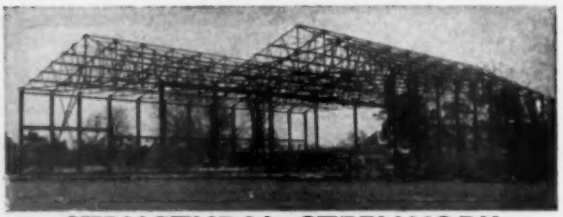

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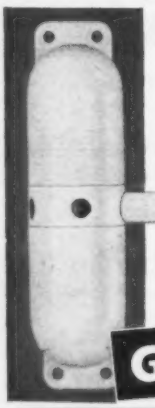

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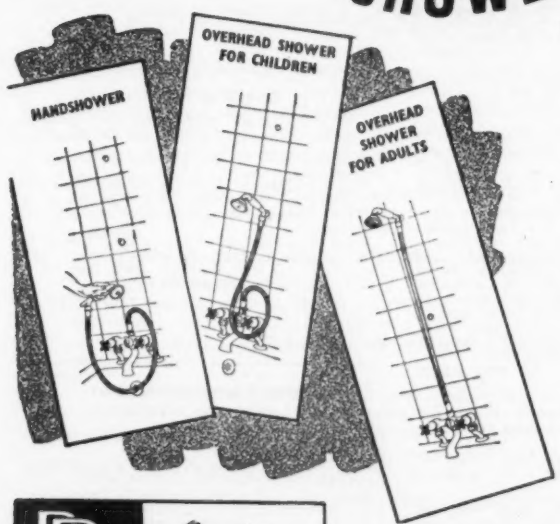

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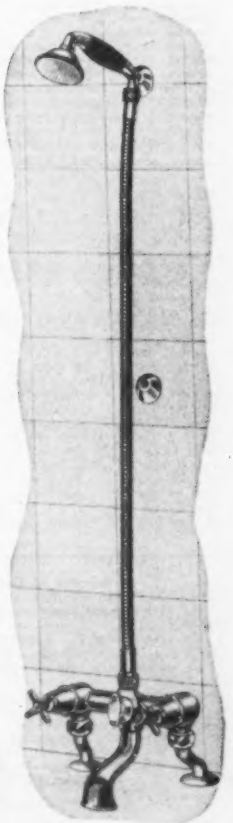

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Candidates for both posts must be Associates of the R.I.B.A.

Those for (a) should have high ability in design and be capable of preparing schemes and supervising contracts in connection with general housing, including multi-storey flats, public buildings, school buildings, minor improvements and maintenance works.

Candidates for (b) to be capable of preparing designs for schemes mentioned for post (a) above, under the direction of the Chief Architectural Assistant.

The appointments will be superannuable, subject to the National Conditions of Service and to the selected candidates passing a medical examination.

Applications on forms to be obtained from and completed and delivered to the undersigned not later than January 29, 1960. Canvassing will disqualify.

KENNETH PEARCE,
Town Clerk.

Municipal Buildings,
Oldbury.
January, 1960. [6034

Borough of Wembley

APPOINTMENT OF ASSISTANT ARCHITECT

(Special Classes £785/£1,070, plus Weighting

APPLICATIONS are invited from suitably qualified persons.

The appointment is subject to the Council's Conditions of Service and to the passing of a medical examination. A five-day week is in operation.

Form of application, returnable by February 2, 1960, obtainable from Borough Engineer and Surveyor, Town Hall, Wembley. Quote Ref: "A."

KENNETH TANSLEY,
Town Clerk.

Town Hall,
Wembley.
January 15, 1960. [6045

County Borough of East Ham

ASSISTANT PLANNING OFFICER, Grade APT I (£610/£765).

SENIOR ASSISTANT PLANNING OFFICER, Grade APT II (£765/£890).

PRINCIPAL ASSISTANT PLANNING OFFICER, Grade APT III (£880/£1,065).

Vacancies in Borough Engineer's Department. London Weighting paid in addition.

Salaries above minimum paid according to qualifications and experience.

Subsistence allowance may be paid over a reasonable period to persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Details and application form from the Town Clerk, E.6.

Closing date January 29, 1960. [6027

MISCELLANEOUS SECTION

RATE: 1/9d per line, minimum 3/6d, average line 6 words. Each para charged separately. Advertisements for Situations Wanted are accepted at the specially reduced rate of 6d. per line, minimum 1/6d.

BOX NOS. add 2 words plus 1/- for registration and forwarding replies which should be addressed c/o "The Architect & Building News," Dorset House, Stamford Street, London, S.E.1.

SEMI-DISPLAY Advertisements with centralised lines are charged at 25/- per inch. and pro rata, minimum half inch.

PRESS DAY, Monday. Remittances payable to Messrs. Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.

No responsibility accepted for errors

APPOINTMENTS (cont)

Rate: 25/- per inch and pro rata, minimum half inch.

County Borough of East Ham
ARCHITECTURAL ASSISTANTS
APT I, salary up to £795 per annum

SUBSISTENCE allowances may be granted over a reasonable period to the persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by February 5, 1960, from the Town Clerk, Town Hall, East Ham, E.6. [6043

Hampshire County Council
ARCHITECTURAL ASSISTANT
APT I (£610/£765)

REQUIRED for pensionable post in County Architect's Department. Candidates should be studying for the Intermediate examination of the R.I.B.A., and have had several years' experience in an architect's office. Assistance with removal and other expenses in approved cases. Five-day week. Canteen facilities.

Application forms (send s.a.e.), returnable by February 3, from the Clerk of the County Council, The Castle, Winchester. [6041

Borough of Poole
BOROUGH ARCHITECT
(New Appointment)

REQUIRED for Borough of Poole. Salary scale £2,195/£2,530, plus car allowance £150. Forms (to be returned by February 13) and particulars from the Town Clerk, Municipal Buildings, Poole. [6024

Southern Electricity Board
ARCHITECTURAL ASSISTANT

SUB-AREA Office of No. 3 (Portsmouth) Sub-Area. Salary N.J.B. Grade 5 of Schedule "D" (£790 x £20—£890 per annum). N.J.B. Conditions of Service.

Applications are invited for the above appointment from persons requiring a minimum of supervision. Possession of Intermediate R.I.B.A. or R.I.C.S. would be an advantage. There is an interesting variety of new and alteration work on offices, showrooms, workshops and industrial buildings.

Canteen and sports facilities. Five-day week. Leave: 3½ to 4 weeks, dependent upon service.

The successful candidate will be required to contribute to the Electricity Supply (Staff) Superannuation Scheme, if eligible.

Applications on forms obtainable from the Sub-Area Secretary, Lower Drayton Lane, Cosham, Portsmouth, and returned to him not later than February 1, 1960, quoting Z.1116. [6042

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Aged between 35 and 45 required by firm in the Midlands, employing 150-200 operatives, specializing in all sections of high-class joinery and furniture manufacture. Must be fully experienced and qualified in all branches, administrative and technical.

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Applications stating age, present salary and full details of previous experience should be sent to:

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BOROUGH OF WATFORD

WATFORD is a pleasant, thriving town in South-West Hertfordshire, in the Green Belt and with easy access to the open country. Although within easy reach of London it has a distinct civic consciousness and cultural, shopping, educational and transport facilities are excellent.

The Corporation has a large number of projects in hand and envisaged, including Swimming Bath, Library extensions, Multi-storey buildings, Flatted factories and housing expansion of the Borough Engineer's Surveyor's and Architect's Department is contemplated to handle these schemes.

Applications are invited from suitably qualified candidates for:

(a) **Assistant Architects.** Salary within Grade Special plus £70 per annum Special Responsibility Allowance. (Maximum salary £1,140 per annum.)

(b) **Architectural Assistants.** Salary within Grades II/III APT (£765/£1,065).

(c) **Architectural Assistants.** Salary with Grades I/II APT (£610/£880).

Assistants appointed to posts (a) will be Section Leaders for various projects and will carry a considerable amount of responsibility.

Commencing salaries will be commensurate with experience and ability and housing accommodation will be provided for those requiring it.

Applications to be sent to the undersigned not later than January 27, 1960.

F. C. SAGE, A.M.I.C.E., M.I.Mun.E., Reg. Architect,
Borough Engineer, Surveyor and Architect.

Town Hall,
Watford,
Herts.

ARCHITECTURAL APPOINTMENTS VACANT

Rate: 1/9 per line, minimum 3/6, average line six words.

ARCHITECTURAL ASSISTANT required with good general training, capable of taking charge of London office. Good opportunity for progressive young architect. Write giving particulars of qualifications and salary required to Box 6936. [0490

ARCHITECTURAL ASSISTANTS of Final and Inter-standard required for work on industrial buildings. Excellent opportunities in an expanding London office. Apply stating age, experience and salary range, to the Chief Architect, Nuclear Civil Constructors, 52-55 Carnaby Street, London, W.1. [0820

ARCHITECTURAL ASSISTANT, London, Final standard. Industrial and commercial. Progressive and interesting. Salary according to experience and ability. Box 3667. [0079

ARCHITECTURAL ASSISTANTS, Intermediate standard or above, required by F. G. Broadbent & Partners, 13 Manchester Square, W.1. Give details of training, experience and salary required. [6038

ARCHITECTS' ASSISTANT required of Intermediate standard with office experience and able to take some responsibility on small contracts. Should be quick and accurate draughtsman, aged 20 to 25. Apply in writing to Scherrer & Hicks, 27 King Street, Manchester, 2. [6039

ARCHITECTURAL ASSISTANT, Intermediate standard. Busy London office. Good prospects. Box 3668. [0080

ARCHITECTURAL ASSISTANT at Final standard required by Buckinghamshire office. Interesting and varied work with scope for initiative and responsibility. State age, experience and salary required to Box 5143. [0136

ARCHITECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20 Bedford Square, London, W.C.1. [0916

ARCHITECTURAL ASSISTANTS, Senior and Junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Write Box 5793. [0999

ARCHITECTURAL ASSISTANTS required. R.I.B.A. Intermediate standard with some office experience. Varied and interesting work. Five-day week. Good salaries for keen and competent people. William Crabtree, F.R.I.B.A., 8 Robert Adam Street, W.1 (WELbeck 9909). [6000

ARCHITECTURAL ASSISTANTS, Intermediate and Final standards, required in Architect's Department for work in connection with flat, maisonnette, shop and housing developments throughout the country. Applicants must be competent draughtsmen with contemporary outlook. Good salary and prospects. Pension scheme in operation. Apply: Architectural Department, Davis Estates Ltd., 346/350 Kilburn High Road, N.W.6. [6018

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ARCHITECTURAL ASSISTANT

APPLICATIONS are invited from candidates holding the Intermediate Certificate of the R.I.B.A. and having practical experience. Varied and interesting work. Starting salary £525/£605 per annum according to age and experience. Apply in writing to Personnel Officer, Royal Infirmary, Lauriston Place, Edinburgh, 3. [5998

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ELIE MAYORCAS requires Senior Assistants with minimum of three years' office experience in this country. Write, giving particulars of architectural education and experience, and salary required, to: 13 David Mews, Baker Street, W.1. [6012

HICKTON, MADELEY & SALT, FF.R.I.B.A., require capable Assistant in interesting and progressive practice. Good prospects. Salary according to experience. 24 Hatherton Road, Walsall, Staffs. [6025

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INTERMEDIATE standard Architectural Assistant required immediately for work on exhibition and ancillary buildings. Write giving details of age, training and experience, if any, to the Staff Architect, Olympia Limited, Kensington, London, W.14. [0640

J. H. NAPPER & PARTNERS require an Architectural Assistant for interesting and varied work in a busy office. Salary by arrangement according to experience. Please write giving full details of career and qualifications to 133 Osborne Road, Newcastle upon Tyne, 2. [6031

QUALIFIED ARCHITECT required, Bristol. Industrial/commercial experience. Scope for individuality and freedom of expression. Good salary. Interesting work. Pension scheme. Assistants of Intermediate standard also required. Details of experience to W. H. Watkins, Gray and Partners, 1 Clare Street, Bristol, 1. [6032

SENIOR AND JUNIOR ARCHITECTS' ASSISTANTS, Final and Intermediate standards, required at the North London office of a property investment company. Interesting estate redevelopment. Applicants must have sound knowledge and experience of building construction and design of domestic architecture, surveys, specifications, site supervision and L.B. Acts.

Salaries: £1,000 Senior post; £650 Junior post. Apply Box 6780. [6008

SENIOR ARCHITECTURAL ASSISTANTS, and Juniors up to about Intermediate standard, required for varied industrial and commercial work in West End office. Scope for initiative and advancement. Salary from £500 to £1,000, according to age and experience. Five-day week. Write giving full details to Box 6379. [0888

SENIOR ASSISTANT, A.R.I.B.A. or Final standard, required for London architects' office. Interesting and varied practice. Salary £900 to £1,000 according to experience. Five-day week. Telephone WHI 2552 or write Box 6735 "The Architect & Building News", for appointment. [0754

VERNER REES, LAURENCE & MITCHELL require Assistants for work on university projects. Please telephone PARk 3900 for interview or write to 39 Holland Villas Road, W.14. [5999

WATFORD, HERTS. Two Architectural Assistants, of at least R.I.B.A. Inter-standard required for lively, varied and expanding practice. Write or telephone, Dawe, Carter & Partners, 33 Clarendon Road, Watford 27296. [6026

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YORKE, ROSENBERG & MARDALL require Section Leaders for work on universities, schools, hospitals and technical colleges; starting salaries from £1,200 p.a., three to four years' experience desirable. Applicants please state age, training and experience to Y.R.&M., 2 Hyde Park Place, W.2, or ring AMB 4521. [5993

YORKE, ROSENBERG & MARDALL require Assistant Architects; starting salaries from £750 p.a. Applicants please state age, training and experience to Y.R.&M., 2 Hyde Park Place, W.2, or ring AMB 4521. [5994

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DRAUGHTSMAN/BUILDING SURVEYOR required in Chartered Surveyor's London office. Five-day week. Salary £700 per annum. Apply Box 6781. [6009

DRAUGHTSMAN/BUILDING SURVEYOR required for medium-sized architects' office with varied practice. Salary £700/£900 p.a. according to experience. Apply Dowton & Hurst, 10 Portman Street, W.1. HYD 1822. [6040

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Advertisements under this heading only are accepted at the specially reduced rate of 6d per line, minimum 1/6.

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REFRIGERATED SHELVES for bottle cooling; beer and wine coolers, etc., for hotel, catering and licensed trades, supplied and installed. G.V.E. Ltd., 231 Strand, W.C.2. FLE 5947. [0813

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EDUCATIONAL

THE National College for Heating, Ventilating, Refrigeration and Fan Engineering have organized a course on "Modern Heating and Ventilating Practice for the Architect" on successive Wednesday afternoons (for 14 weeks) commencing on March 2, 1960, at the Borough Polytechnic. The course is for qualified and student architects, the emphasis being on modern trends and the objective to give them a better understanding of the heating and ventilating requirements which have to be met in designing buildings. The lectures are to be delivered by experts in their particular fields. The fee for the course is £5 5s.

Further particulars and application forms may be obtained from Mr. F. J. Packer, Clerk to the Governing Body, Borough Polytechnic, Borough Road, London, S.E.1. [6028

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